

United States Marine Corps

Base Realignment and Closure Cleanup Plan (BCP)



**For
Marine Corps Air Station,
El Toro, CA**

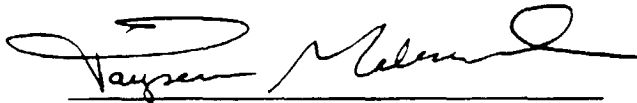
CTO-0103

Document Control No.: CTO-0103/0058

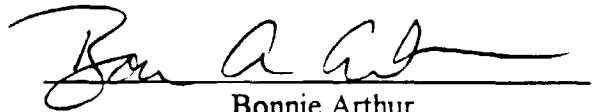
1 March 1996

MARINE CORPS AIR STATION
EL TORO, CALIFORNIA
BASE REALIGNMENT AND CLOSURE
(BRAC) CLEANUP PLAN


This BRAC Cleanup Plan provides current summary information on the status of, and strategies for, the cleanup of Marine Corps Air Station El Toro. We, the BRAC Cleanup Team, with consideration of community and stakeholder advice, have cooperatively developed this plan to provide for the safe, effective, timely, and cost-efficient environmental restoration and productive reuse of this closing DoD facility. This plan will be updated periodically to reflect new information regarding the environmental condition of the property, reuse priorities, and availability of funds.



Tayseer Mahmoud
Remedial Project Manager
California Environmental Protection Agency,
Department of Toxic Substances Control



Bonnie Arthur
Remedial Project Manager
United States Environmental
Protection Agency

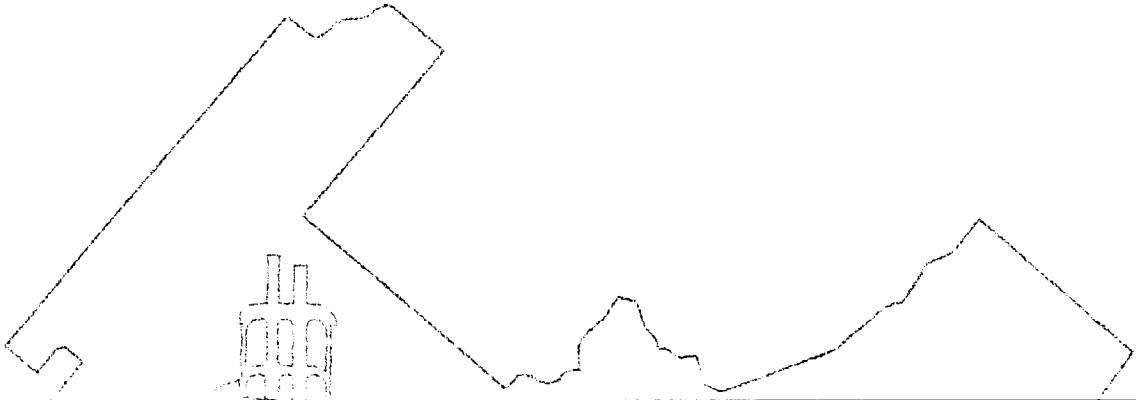


Joseph Joyce
BRAC Environmental Coordinator
MCAS El Toro

Signed on 20 February 1996

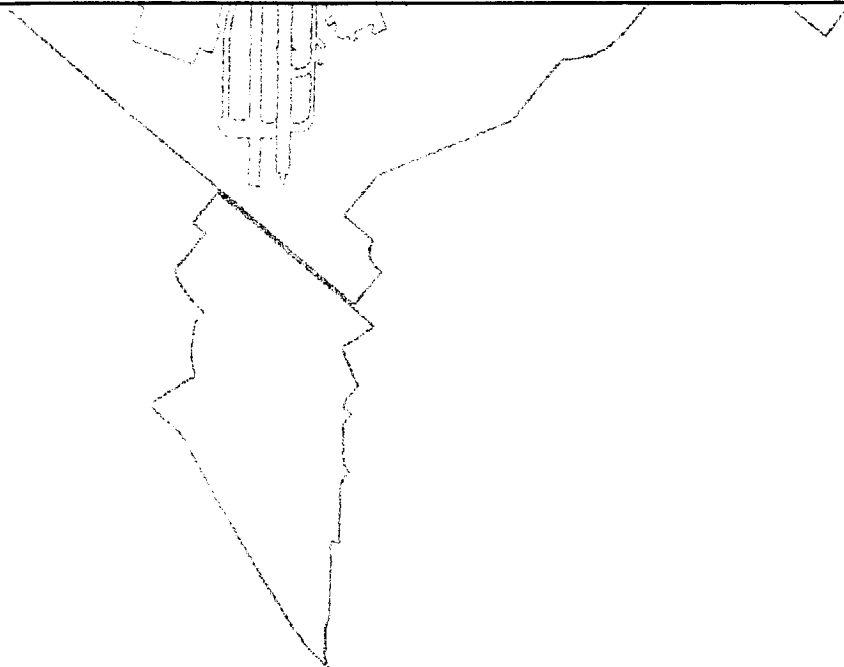
CTO-0103/0058

MCAS El Toro BRAC Cleanup Plan
Vision and Mission Statements



Vision: Maximize restoration and reuse by 1999

Mission: Fast-track remediation of MCAS El Toro to expedite reuse and protect human health and environment



List of Acronyms

AB	Assembly Bill
ACER	Aircraft Expeditionary Refueling
ACM	asbestos-containing materials
AC/S	Assistant Chief of Staff
AOC	area of concern
AP	American Processing
AQMP	Air Quality Management Plan
AR	Administrative Record
ARAR	applicable or relevant and appropriate requirement
AST	aboveground storage tank
Basin	the Los Angeles Basin
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BEIDMS	Bechtel Environmental Integrated Data Management System
BFI	Browning Ferris Industries
bgs	below ground surface
BMP	best management practice
BNI	Bechtel National, Inc.
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylenes
Cal-EPA	California Environmental Protection Agency
CBCEC	California Base Closure Environmental Committee
CCR	<i>California Code of Regulations</i>
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEO	Chief Executive Officer
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	<i>Code of Federal Regulations</i>
CLEAN	Comprehensive Long-Term Environmental Action Navy
CMC	Commandant of the Marine Corps
CNDDDB	California Natural Diversity Database
COE	U.S. Army Corps of Engineers
COMCABWEST	Commander, Marine Corps Air Bases Western Area
COPC	chemical of potential concern
County	Orange County
CP	CERFA Parcel
CRDL	contract-required detection limit
CRP	Community Reuse Plan

List of Acronyms

CTO	Contract Task Order
CVZME	continuous vapor zone monitoring equipment
D&M	Dames and Moore
D&R ROD	Disposal and Reuse Record of Decision
DDT	dichlorodiphenyltrichloroethane
DFSC	Defense Fuel Supply Center
Districts	County Sanitation Districts of Orange County
DoD	Department of Defense
DON	Department of the Navy
DRMO	Defense Reutilization and Marketing Office
DTSC	(Cal-EPA) Department of Toxic Substances Control
EBS	Environmental Baseline Survey
ECP	environmental condition of property
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EO	Environmental Office
EOD	exploded ordnance disposal
ETLRA	El Toro Local Redevelopment Authority
ETRPA	El Toro Reuse Planning Authority
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FDS	Federal Disposal Services
FFA	Federal Facilities Agreement
FOSL	finding of suitability to lease
FOST	finding of suitability to transfer
FS	feasibility study
ft/day	feet per day
G	generator
GCP	general chemistry parameters
GIS	geographical information system
HSP	health and safety plan
IAFS	Interim Action Feasibility Study
IDP	Irvine Desalter Project
IDW	investigation-derived waste
IRP	Installation Restoration Program
IT	International Technology Corporation
ITEMS	International Technology Environmental Management System
IWTP	industrial wastewater treatment plant
Jacobs	Jacobs Engineering Group, Inc.

List of Acronyms

JMM	James M. Montgomery Engineers
LBP	lead-based paint
LOC	location of concern
LRA	Local Redevelopment Authority
LUFT	(California) leaking underground fuel tank
µg/L	micrograms per liter
MCAS	Marine Corps Air Station
mg/L	milligrams per liter
MOU	memorandum of understanding
MSL	mean sea level
MWR	Morale, Welfare, and Recreation Office
NAVFAC	Naval Facilities
NAVFACENGCOM	Naval Facilities Engineering Command
NAVRAMP	Navy Radon Assessment and Mitigation Program
NCP	National Contingency Plan
NEDTS	Navy Environmental Data Transfer Standards
NEESA	Naval Energy and Environmental Support Activity
NFA	no further action
NFESC	Naval Facilities Engineering Services Center
NEPA	National Environmental Policy Act
NFI	no further investigation
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
OCHCA	Orange County Health Care Agency
OCWD	Orange County Water District
OEA	Office of Economic Adjustment
OU	operable unit
OWS	oil/water separator
PAH	polynuclear aromatic hydrocarbons
PBR	Permit by Rule
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PMTC	Pacific Missile Test Center
POI	points of interest
POL	petroleum, oils, and lubricants
ppb	parts per billion
ppm	parts per million
PR	preliminary review
PRG	preliminary remediation goal
Project Team	BRAC Project Team
PWC	Navy Public Works Center

List of Acronyms

QAPP	Quality Assurance Project Plan
RAB	Restoration Advisory Board
RAC	remedial action contract
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act
RD	remedial design
RECLAIM	Regional Clean Air Initiatives Market
RFA	RCRA Facility Assessment
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
RWQCB	Regional Water Quality Control Board
SAIC	Science Applications International Corporation
SAP	sampling and analysis plan
SARA	Superfund Amendments and Reauthorization Act
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SI	Site Inspection
Station	Marine Corps Air Station El Toro
STP	Sewage Treatment Plan
SVE	soil vapor extraction
SVOC	semivolatile organic compound
SWDIV	Southwest Division Naval Facilities Engineering Command
SWMU	solid waste management unit
TAA	temporary accumulation area
TAFDS	tactical airfield fuel dispensing system
TAG	Technical Assistance Grant
TDS	total dissolved solids
TF	tank farm
TPH	total petroleum hydrocarbons
TRC	Technical Review Committee
TSCA	Toxic Substances Control Act
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USMC	United States Marine Corps
UST	underground storage tank
VL	various locations
VOC	volatile organic compound
VSI	visual site inspection
WW II	World War II

Executive Summary

INTRODUCTION

The Navy is planning the closure and disposal of Marine Corps Air Station (MCAS) El Toro (Station) by July 1999 in accordance with the Base Closure and Realignment Act (1993, BRAC III). The Navy has organized a Base Realignment and Closure (BRAC) Cleanup Team (BCT) to manage and coordinate closure activities and to prepare a BRAC Cleanup Plan (BCP). The BCP describes the status of, management and response strategies for, and action items related to MCAS El Toro environmental restoration and compliance programs. These programs support the environmental restoration of station property and its disposal and reuse. The scope of the BCP considers the following regulatory mechanisms:

- Base Closure and Realignment Act;
- National Environmental Policy Act (NEPA);
- Resource Conservation and Recovery Act (RCRA);
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act, and the Community Environmental Response Facilitation Act (CERFA); and
- other applicable state and local laws.

The BCP is a planning document, and therefore the information and assumptions presented may not have complete approval from the federal and state regulatory agencies. The BCP is a dynamic document that will be updated regularly to reflect the current status of response actions, and the changes in strategies or plans that affect the ultimate restoration and disposal of MCAS El Toro property. Comments from various sources, including major claimants, naval activities, and federal and state regulatory agencies, will be evaluated and considered for inclusion into updates of this BCP. This document represents information available as of 31 December 1995. The next update of the BCP is scheduled for March 1997.

STATUS OF DISPOSAL, REUSE, AND INTERIM LEASE PROCESS

In March 1994, Orange County (County), along with the cities of Irvine and Lake Forest, formed the El Toro Reuse Planning Authority. In January 1995, however, the County withdrew to pursue formation of a new reuse committee as mandated by Orange County Measure A.

As part of base closure, the following key documents will be prepared:

- Community Reuse Plan by the Land Redevelopment Authority, and
- Environmental Impact Statement by the Marine Corps.

In the absence of a reuse plan for the Station, reuse parcels have been identified according to the Station existing land use presented in the MCAS El Toro Master Plan (MCAS El Toro 1991).

Screening of excess real property at MCAS El Toro is currently being conducted in accordance with the Base Closure Community Redevelopment and Homeless Assistance Act of 1994. The final Environmental Baseline Survey Report (April

1995) designates approximately 2,982 acres (63 percent) of the real property at the Station eligible under CERFA for transfer as uncontaminated property (area type 1: no storage, disposal, release, and/or migration of contaminants has occurred). The majority of remaining real property has been identified as area type 6 (storage, disposal, release, and/or migration of contaminants has occurred, but no response actions have been taken) and area type 7 (unevaluated areas or areas requiring additional evaluation). The aerial extent of land of area types 6 and 7 is 1,084 acres (23 percent) and 662 acres (14 percent), respectively.

Currently, two public highway expansion projects are underway that will result in transfer of MCAS El Toro property. These projects are the Bake Parkway/Interstate 5 project and the Alton Parkway Extension project.

The County and the Department of the Navy have entered into agreements permitting the transfer by quitclaim deed of the Bake Parkway/Interstate 5 right-of-way and the Alton Parkway right-of-way at fair market value. The Department of the Navy issued a license for construction of the road for the Bake Parkway/Interstate 5 project, pending completion of a Finding of Suitability to Transfer and transfer deeds.

The following federal agencies have submitted requests for MCAS El Toro property:

- Air National Guard,
- Department of Interior,
- Department of Justice/Bureau of Prisons,
- Federal Aviation Administration,
- Immigration and Naturalization Service,
- Marine Corps Exchange, and
- Defense Exchange Agency.

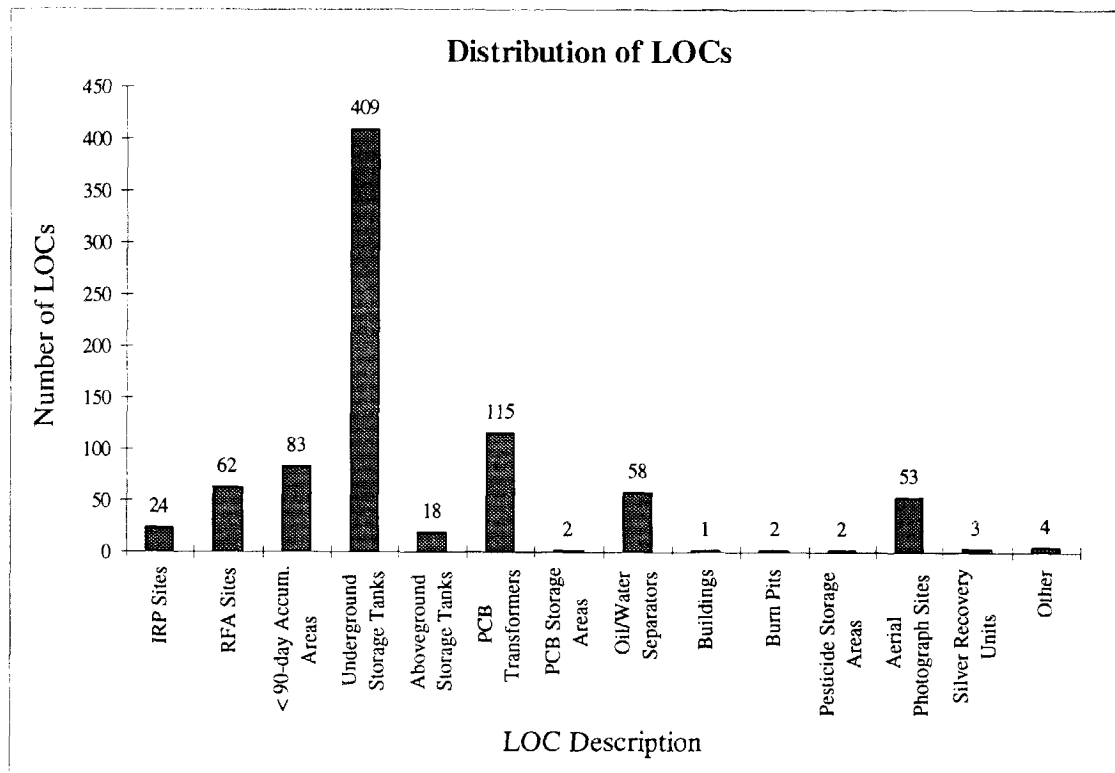
None of the requested transfer actions for Department of Defense or federal agencies has been approved by the Assistant Secretary of the Navy as of 31 December 1995. Parcel recipients and disposal methods cannot be finalized until the reuse plan is finalized and the Disposal and Reuse Record of Decision is issued.

STATUS OF ENVIRONMENTAL RESTORATION PROGRAM

Over 800 locations of concern (LOCs) have been identified at MCAS El Toro. An LOC is defined as any identified location or area that is potentially contaminated or is a potential source of contamination. Exhibit ES-1 summarizes the types and number of different LOCs at the Station.

Installation Restoration Program. Currently, a total of 24 sites are being investigated in the Installation Restoration Program (IRP) at the Station. Of these, 22 sites were evaluated during the Phase I Remedial Investigation (RI), which was completed in May 1993. The final work plan for the Phase II RI/Feasibility Study (FS) was prepared in July 1995, and Phase II investigation has begun. Two additional

Exhibit ES-1



Source: Table 3-1a

sites were established for investigation in Phase II, bringing the total number of IRP sites to 24.

The IRP sites have been grouped into three operable units (OUs). In December 1994, OU-2 was subdivided by the parties to the Federal Facilities Agreement. The OUs are currently defined as follows.

- OU-1: Groundwater on- and off-Station that is contaminated with constituents that have migrated from the Station (Site 18).
- OU-2: Potential source areas of volatile organic compound (VOC) groundwater contamination.
 - OU-2A: Two sites (Sites 24 and 25) that are believed to be contributing to the VOC plume emanating from the southwest portion of the Station.
 - OU-2B: Two Station landfills (Sites 2 and 17) that will require further investigation and groundwater monitoring and likely will have presumptive remedies applied.
 - OU-2C: Two additional Station landfills (Sites 3 and 5) that will undergo further groundwater monitoring.
- OU-3: Includes those IRP sites not addressed in the other OUs (Sites 1, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, and 22). All or portions of Sites 4, 7, 8, 11, 12, 13, 14, 19 and 20 are scheduled for early actions.

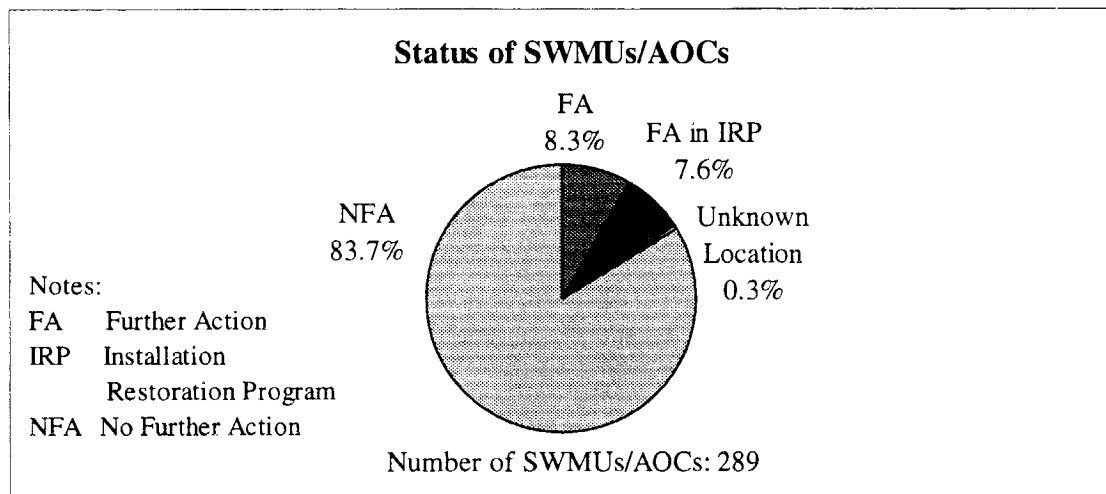
The Federal Facilities Agreement specifies that the draft Records of Decision for each OU be completed by the following dates.

- OU-1 is scheduled to be completed by 30 May 1996.
- OUs 2A, 2B, and 2C are scheduled to be completed by 22 January, 19 February, and 17 March 1997, respectively.
- All or portions of 10 OU-3 sites are being included in the Phase II RI/FS (Sites 1, 6, 8, 9, 10, 12, 15, 16, 21, and 22). Draft Records of Decision are scheduled to be completed by 21 October 1997.
- All or portions of nine OU-3 sites will not be included in the Phase II RI (Sites 4, 7, 8, 11, 12, 13, 14, 19, and 20).

RCRA Facility Assessment Sites. A RCRA Facility Assessment (RFA) was performed at the Station between 1990 and 1993. The RFA included the investigation of 307 solid waste management units/areas of concern (SWMUs/AOCs). However, three units were located at MCAS Tustin, and 15 units were duplicates of other SWMUs/AOCs. Therefore, a total of 289 SWMUs/AOCs are of interest at the Station. Of these, 140 were included in a sampling effort. The RFA was approved by the Department of Toxic Substances Control contingent upon performance of additional investigation at 14 SWMUs/AOCs. A draft final addendum to the RFA was completed in December 1995 (BNI 1995b). The addendum presents results and recommendations for the 14 SWMUs/AOCs and recommended closure strategies for 73 temporary accumulation areas. Exhibit ES-2 summarizes the status of SWMUs/AOCs. The number of SWMUs/AOCs in Exhibit ES-2 is greater than the number of RFA sites indicated in Exhibit ES-1 because some LOCs have been designated as both SWMUs/AOCs and as other types of LOCs. For example, there are underground storage tanks (USTs) that have been identified as SWMUs/AOCs. Exhibit ES-1 refers to these SWMUs/AOCs as USTs instead of as RFA sites.

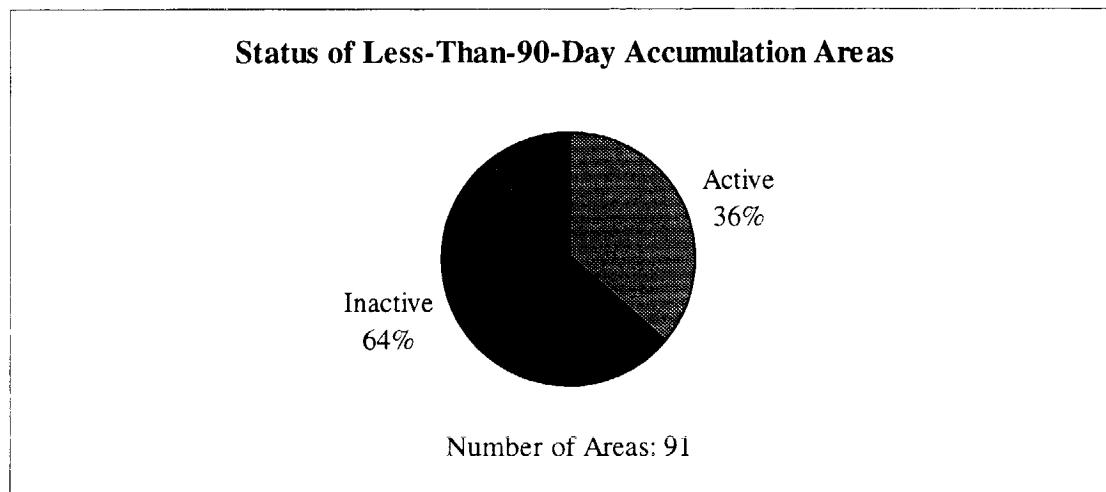
Compliance Program Sites and Other LOCs. There are a number of compliance programs in progress at MCAS El Toro which involve different types of LOCs including less-than-90-day accumulation areas, USTs, polychlorinated biphenyls (PCBs) transformers, and oil/water separators. Exhibits ES-3 through ES-6 summarize the status of less-than-90-day accumulation areas, USTs, PCB transformers, and oil/water separators, respectively. The status of the remaining types of LOCs (aboveground storage tanks, PCB storage sites, burn pits, silver recovery units, pesticide storage sites, and aerial photograph sites) is discussed in Chapter 3.

Exhibit ES-2



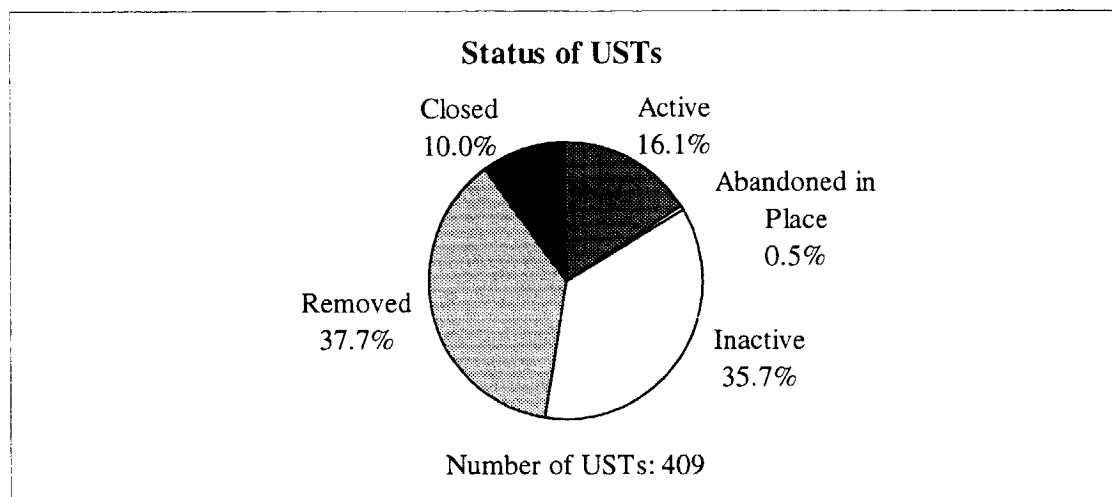
Source: Table 3-13

Exhibit ES-3



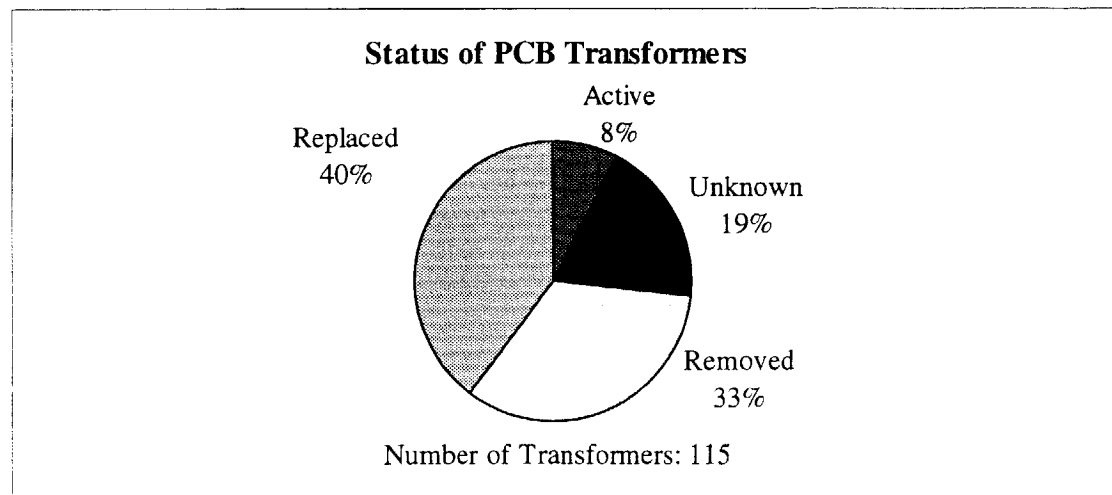
Source: Table 3-9

Exhibit ES-4



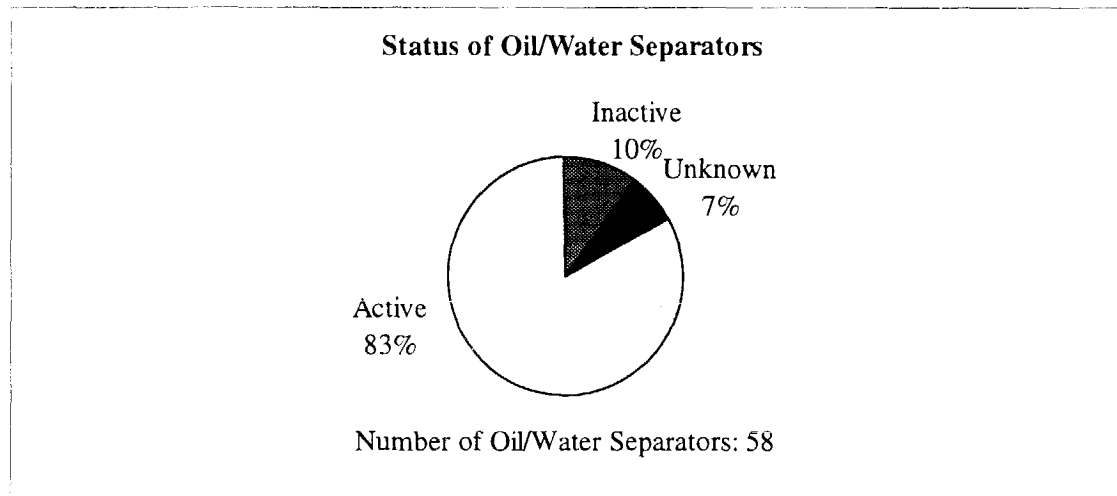
Source: Table 3-7

Exhibit ES-5



Source: Table 3-10

Exhibit ES-6



Source: Table 3-14

INITIATIVES FOR ACCELERATING CLEANUP

The BCT has conducted a "Bottom Up" review of the environmental programs at MCAS El Toro in accordance with Department of Defense Guidance on Establishing Base Realignment and Closure Cleanup Teams (DoD 1993). During the "Bottom Up" review process, the following 10 issues were addressed to identify opportunities for accelerating cleanup activities necessary to facilitate conveyance of real property at the Station.

Technology Review: Publications such as Treatment Technologies Applications Matrix for Base Closure Activities, prepared by the California Military Base Closure Environmental Committee, dated November 1994, will be reviewed as part of the evaluations performed in selecting technologies.

Immediate Removal Actions: A UST Tiger Team has been formed at the Station to address compliance and closure issues related to USTs on-Station. The Tiger Team has scheduled 108 USTs for removal by 1997:

- 35 USTs are scheduled for removal by 1996;
- 58 additional USTs are scheduled for removal by 1996 or 1997; and
- 15 USTs are scheduled for removal by 1997.

The Tiger Team will continue to develop strategies for the removal of the remaining USTs as the Station closure approaches in 1999.

Clean Properties: A basewide Environmental Baseline Survey for MCAS El Toro was submitted to the United States Environmental Protection Agency (U.S. EPA) and California Environmental Protection Agency (Cal-EPA) on 1 April 1995. The Navy, Marine Corps, and regulators have concurred on the designation of area type 1 parcels as CERFA eligible (approximately 2,982 acres). Since uncontaminated areas do not

coincide with the zone designations based on current land use, the BCT and the Land Redevelopment Authority will need to determine how to transfer these properties expeditiously. Options include subdividing the existing zones based on area type.

Overlapping Phases: As an ongoing effort, the BCT will continue to identify phases of the cleanup process that can be overlapped to reduce the time required for completion. As such, areas of overlap include the following:

- the RFA was conducted concurrently with the Phase I RI;
- treatability studies are being conducted concurrently with the early stages of the OU-2 RI;
- Engineering Evaluation/Cost Analyses are being conducted simultaneously with the Phase II RI activities;
- Phase II RI/FS activities for OU-2 and OU-3 sites are being conducted simultaneously; and
- combined facilities for conducting RCRA, UST, and RI/FS activities are being utilized.

Contracting Procedures: A Remedial Action Contract (RAC) was executed with OHM Remediation Services Corporation to conduct response actions on installations within the purview of Southwest Division Naval Facilities Engineering Command (SWDIV). SWDIV management of the Comprehensive Long-Term Environmental Action Navy (CLEAN), RAC, and indefinite quantity contracts has been based on a cooperative and interactive approach. Active participation by all members of the Project Team results in a bias for action.

Community Reuse Interface: In an effort to carry out strategies for environmental restoration activities, while assuring proactive community involvement, the Station has adopted an approach to meet the needs of the public as well as the requirements of NEPA, CERCLA, CERFA, and the California Health and Safety Code Section 25356.1. The approach provides for a number of services to inform interested parties (e.g., the city of Irvine, the city of Lake Forest, and Orange County) of environmental restoration activities while maintaining a commitment for efficient and cost-effective cleanup at MCAS El Toro.

Bias for Cleanup: The BCT will continue to emphasize expedited remedial actions and attempt to avoid lengthy site characterization studies and prolonged RI/FS activities. As such, the BCT members will continue to collaborate in devising work plans, identifying cleanup criteria, and selecting remedial actions in an effort to aggressively pursue cleanup instead of studies and data collection. To date, the BCT has successfully expedited environmental restoration by initiating removal actions under the Superfund Accelerated Cleanup Model at seven IRP sites.

Validation of Technology: The BCT and BRAC Project Team have been formed to include technical, operational, reuse, and administrative specialists who provide input and support for efforts to achieve accelerated cleanup and transfer of Station property. Some of the project team members include representatives from the following:

- U.S. EPA, Cal-EPA, and other local regulatory agencies (e.g., Orange County Health Care Agency),
- SWDIV,
- MCAS El Toro BRAC office,
- MCAS El Toro Environmental Office,
- MCAS El Toro Engineering Division,
- MCAS El Toro Planning Department,
- CLEAN I and CLEAN II contractors, and
- RAC contractor.

Presumptive Remedies: Presumptive remedies are preferred technologies for common categories of sites, based on previous remedy selection and U.S. EPA scientific and engineering evaluation of performance data on technology implementation. The presumptive remedy approach is one tool of accelerating cleanup under the Superfund Accelerated Cleanup Model. By using presumptive remedies, site investigations and selection of cleanup strategies can be streamlined. Presumptive remedies are expected to assure consistency in remedy selection and reduce time and cost required to clean up similar types of sites. Currently, presumptive remedies are recognized by the U.S. EPA for VOC remedies and municipal landfill remedies. Presumptive remedies are being considered for the OU-2 landfill sites (Sites 2, 3, 5, and 17).

Partnering: A partnering agreement among the Project Team is essential for efficient management of the base closure process. The BCT has established a partnering agreement and team charter that incorporates the latest and most efficient management techniques to coordinate installation restoration activities.

The following team charter agreement for MCAS El Toro was developed during a team-building seminar held in October 1994:

We, the MCAS El Toro partners, commit to effectively working together to maximize restoration and reuse of MCAS El Toro by 1999. We will accomplish this goal through teamwork, dedicated and focused participation, our ethics outlined below, and effective communication between all partners.

We want the project to be enjoyable to work on and will work together with trust and respect, and will ensure that all team members interests impact decisions. Problems will be resolved quickly or escalated if appropriate by team members closest to the issue. As partners, we commit to communicating our mission and partnership goals to new project members and encourage them to embrace this partnership.

Our mutually agreed upon ethical standards are listed below.

CODE OF ETHICS

- Integrity
- Trust
- Model the behavior you expect from others
- Sincere
- Empathetic
- Value other's opinions
- Responsible
- Honor diversity
- Honesty
- Openness
- Dependable
- Respectful
- Be a good listener
- Accountable
- Have fun
- Credible
- Be candid

SUMMARY OF CURRENT BCP ACTION ITEMS

Table ES-1 provides a list of recommendations and issues associated with the environmental restoration and compliance that require further evaluation and action by the BCT. The list covers key items identified during the course of the BCP preparation and includes the BCT activities relating to the base closure.

The BCT has coordinated and managed a number of tasks relating to the BRAC cleanup activities at MCAS El Toro during the past year. A brief list of accomplishments include:

- establishment of the Restoration Advisory Board in April 1994;
- establishment of a UST Tiger Team to address UST compliance and closure issues;
- development of an expedited UST removal program for the removal of 108 USTs by 1997;
- identification of a RAC contractor to conduct response actions on bases within the purview of SWDIV;
- approval of the RFA report from Cal-EPA;
- implementation of Superfund Accelerated Cleanup Fund to expedite response actions at nine IRP sites through the preparation or proposed preparation of Engineering Evaluation/Cost Analyses;
- reduction in the number of IRP sites investigated under CERCLA via the CERCLA petroleum exclusion;
- recommendation of no further investigation for a portion of Site 4; and
- completion of personnel interviews to address community concern.
(Through teamwork and BCT cooperation, all concerns were addressed with the collection of only one sample.)

Table ES-1
BCT/Project Team Action Items
(Sheet 1 of 3)

Action Items	STATUS		
	In Progress	To Be Performed	Completed
COMPLIANCE ACTIVITIES			
UST Removal/Compliance			
Install UST monitoring systems	X		
Remove 41 inactive USTs in 1995			X
Obtain closure on 41 UST sites			X
Remove 35 USTs in 1996	X		
Remove 58 additional USTs in 1996 or 1997		X	
Remove 15 USTs in 1997		X	
RCRA Facilities			
Further investigate 14 SWMUs/AOCs per DTSC recommendations			X
Recommend closure strategies for 73 temporary accumulation areas			X
OWSs			
Remove inactive OWSs		X	
Evaluate active OWSs for removal after 1999		X	
PCBs			
Evaluate past PCB transformer storage areas	X		
Hazardous Waste Management			
Maintain current compliance program	X		
Close permitted storage facility (Building 673-T3) by November 1995			X
Wastewater Discharges			
Maintain compliance with NPDES Permit	X		
Air Emissions			
Maintain current compliance program	X		
Comply with air regulations when implementing remedial actions		X	
Lead-Based Paint			
Conduct survey of housing facilities			X

Table ES-1
BCT/Project Team Action Items
(Sheet 2 of 3)

Action Items	STATUS		
	In Progress	To Be Performed	Completed
Asbestos			
Conduct survey of housing facilities			X
Cleanup Standards			
Develop cleanup standards for various media	X		
Conceptual Models			
Update conceptual site models		X	
Risk Assessments			
Update risk assessment		X	
Early Action Items			
Identify opportunities	X		
Implement opportunities <ul style="list-style-type: none">- A total of seven EE/CAs (for early action) have been submitted for public comment. At least three additional EE/CAs will be submitted in 1997.- To date, portions of two sites have been eliminated from the RI/FS process through the petroleum exclusion process.- To date, one unit of one site has been eliminated from the RI/FS process with a no further investigation decision.	X		
CERCLA 120(h)(3) CONSIDERATIONS			
Develop a comprehensive EBS			X
Develop an inventory of sites recommended for no further action	X		
COMMUNITY RELATIONS			
Respond to community concerns by conducting personnel interviews with members of the community			X
Update the community relations plan as required			X
Maintain and update the mailing list	X		
Maintain the information in the repository	X		
Update the administrative record quarterly	X		
Publish updated fact sheets	X		
Publish public notices as needed	X		

Table ES-1
BCT/Project Team Action Items
(Sheet 3 of 3)

Action Items	STATUS		
	In Progress	To Be Performed	Completed
MANAGEMENT AND ADMINISTRATIVE SUPPORT ACTIVITIES			
Data Management			
Update and maintain Geographic Information System	X		
Update and maintain database of analytical results from environmental sampling programs	X		

Abbreviations: BCT – Base Realignment and Closure (BRAC) Cleanup Team
 UST – underground storage tank
 RCRA – Resource Conservation and Recovery Act
 SWMU/AOC – solid waste management unit/area of concern
 DTSC – California Environmental Protection Agency Department of Toxic Substances Control
 OWS – oil/water separator
 PCB – polychlorinated biphenyl
 NPDES – National Pollution Discharge Elimination System
 EE/CA – Engineering Evaluation/Cost Analyses
 RI/FS – Remedial Investigation/Feasibility Study
 CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
 EBS – Environmental Baseline Survey

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Chapter	Page
List of Acronyms	LA-1
Executive Summary	ES-1
1 Introduction	
1.1 Environmental Response Objectives	1-2
1.2 BCP Purpose, Updates, and Distribution.....	1-3
1.3 BRAC Cleanup Team/Project Team.....	1-3
1.4 Brief History of Installation	1-3
1.4.1 Site Location.....	1-3
1.4.2 Site History	1-4
1.4.3 Environmental Setting	1-6
1.5 Off-Base Property/Tenants	1-9
2 Property Disposal and Reuse Plan	
2.1 Status of Disposal Planning Process	2-1
2.2 Relationship to Environmental Programs	2-4
2.3 Property Disposal Methods	2-5
2.3.1 Federal Transfer of Property	2-5
2.3.2 No-Cost Public-Benefit Conveyance	2-5
2.3.3 Negotiated Sale.....	2-5
2.3.4 Widening of Public Highways	2-5
2.3.5 Donated Property.....	2-6
2.3.6 Interim Leases	2-6
2.3.7 Competitive Public Sales	2-6
3 Installationwide Environmental Program Status	
3.1 Environmental Program Status	3-3
3.1.1 Restoration Sites	3-4
3.1.2 Installationwide Source Discovery and Assessment Status.....	3-7
3.1.2.1 Aerial Photograph Features/Anomalies.....	3-7
3.1.2.2 Features of Potential Environmental Concern Identified in Personnel Interviews.....	3-8
3.2 Compliance Program Status	3-8
3.2.1 Storage Tanks	3-8
3.2.1.1 Underground Storage Tanks	3-9

Table of Contents

Chapter		Page
	3.2.1.2 Aboveground Storage Tanks	3-12
	3.2.1.3 Fuel Supply Pipelines	3-12
3.2.2	Hazardous Materials/Waste Management.....	3-13
	3.2.2.1 Waste Oil	3-13
	3.2.2.2 Waste JP-5	3-14
	3.2.2.3 Miscellaneous Hazardous Wastes	3-14
3.2.3	Solid Waste Management.....	3-15
3.2.4	Polychlorinated Biphenyls	3-15
	3.2.4.1 PCB Transformers	3-15
	3.2.4.2 PCB Transformers and Equipment Storage Areas	3-17
	3.2.4.3 Non-Transformer PCB Items.....	3-18
3.2.5	Asbestos.....	3-19
3.2.6	Radon.....	3-21
3.2.7	RCRA Facilities (SWMUs).....	3-22
3.2.8	NPDES Permits	3-26
3.2.9	Oil/Water Separators	3-26
3.2.10	Silver Recovery Units	3-28
3.2.11	Lead-Based Paint.....	3-28
3.2.12	Air.....	3-30
3.3	Status of Natural and Cultural Resources	3-31
	3.3.1 Ecological Resources	3-31
	3.3.2 Wetlands and Waters.....	3-33
	3.3.3 Floodplains	3-33
	3.3.4 Archaeological Resources	3-33
	3.3.5 Historic Structures	3-34
	3.3.6 Paleontological Resources.....	3-34
3.4	Environmental Condition of Property.....	3-34
	3.4.1 Area Type 1 (Areas Where No Storage, Release, or Disposal Has Occurred).....	3-35
	3.4.2 Area Type 2 (Areas Where Only Storage Has Occurred)	3-36
	3.4.3 Area Type 3 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but Require No Remedial Action)	3-36
	3.4.4 Area Type 4 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, and All Remedial Actions Have Been Taken)	3-37

Chapter		Page
	3.4.5 Area Type 5 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, and Action Is Underway, but Not Final)	3-37
	3.4.6 Area Type 6 (Areas Where Storage, Release, Disposal, and/or Migration has Occurred, but Required Response Actions Have Not Been Taken)	3-37
	3.4.7 Area Type 7 (Unevaluated Areas or Areas Requiring Additional Evaluation)	3-37
	3.4.8 Suitability of Installation Property for Transfer by Deed	3-38
3.5	Status of Community Involvement	3-38
	3.5.1 Community Relations Plan	3-39
	3.5.2 Designated Contacts	3-39
	3.5.3 Information Repositories	3-39
	3.5.4 Administrative Record	3-39
	3.5.5 Restoration Advisory Board	3-40
	3.5.6 Mailing List	3-40
	3.5.7 Fact Sheets	3-41
	3.5.8 Technical Assistance Grants	3-41
	3.5.9 Public Meetings	3-41
	3.5.10 Federal Facility Agreement Process	3-42
	3.5.11 Environmental Impact Statement Process	3-42
4	Installationwide Strategy for Environmental Restoration	
4.1	Zone/Operable Unit Designation and Strategy	4-2
	4.1.1 Zone Designations	4-2
	4.1.2 Operable Unit Designations	4-3
	4.1.3 Sequence of Operable Units	4-3
	4.1.4 Early Actions Strategy	4-4
	4.1.5 Remedy Selection Approach	4-4
	4.1.6 Installationwide Source Discovery and Assessment Strategy	4-5
4.2	Compliance Strategy	4-5
	4.2.1 Storage Tanks	4-5
	4.2.1.1 Underground Storage Tanks	4-5
	4.2.1.2 Aboveground Storage Tanks	4-8
	4.2.1.3 Fuel Supply Pipelines	4-8
	4.2.2 Hazardous Materials/Waste Management	4-8
	4.2.3 Solid Waste Management	4-8
	4.2.4 Polychlorinated Biphenyls	4-9
	4.2.4.1 PCB Transformers	4-9

Chapter		Page
	4.2.4.2 PCB Storage Areas	4-9
	4.2.4.3 Non-Transformer PCB Items.....	4-10
	4.2.5 Asbestos.....	4-10
	4.2.6 Radon.....	4-10
	4.2.7 RCRA Facilities (SWMUs).....	4-11
	4.2.8 NPDES Permits	4-12
	4.2.9 Oil/Water Separators	4-12
	4.2.10 Silver Recovery Units	4-12
	4.2.11 Lead-Based Paint.....	4-13
	4.2.12 Air.....	4-13
4.3	Natural and Cultural Resources Strategies	4-13
	4.3.1 Archaeological Resources	4-13
	4.3.2 Historic Structures and Resources	4-14
	4.3.3 Threatened and Endangered Species.....	4-14
	4.3.4 Surface Water and Wetlands	4-14
	4.3.5 Paleontological Resources.....	4-14
4.4	Community Involvement Strategy	4-14
5	Environmental Master Schedules	
5.1	Environmental Restoration Program.....	5-1
5.2	Compliance Programs	5-1
5.3	Natural and Cultural Resources	5-2
6	Technical and Other Issues to Be Resolved	
6.1	Data Usability.....	6-1
6.2	Information Management.....	6-1
	6.2.1 BRAC Cleanup Team Action Items.....	6-2
	6.2.2 Rationale.....	6-2
	6.2.3 Status/Strategy	6-2
6.3	Data Gaps	6-2
6.4	Ambient and Background Levels.....	6-3
	6.4.1 Surface Soils.....	6-3
	6.4.2 Groundwater.....	6-3
	6.4.3 Sediment	6-3
	6.4.4 BRAC Cleanup Team Action Items.....	6-3
	6.4.5 Rationale.....	6-4
	6.4.6 Status/Strategy.....	6-4

Chapter	Page
6.5 Risk Assessments	6-4
6.5.1 BRAC Cleanup Team Action Items	6-4
6.5.2 Rationale	6-4
6.5.3 Status/Strategy	6-5
6.6 Basewide Remedial Action Strategy	6-5
6.7 Interim Monitoring of Groundwater and Storm Water	6-6
6.8 Excavation of Contaminated Materials	6-6
6.9 Protocols for Remedial Design Reviews	6-7
6.10 Conceptual Models	6-7
6.10.1 BRAC Cleanup Team Action Items	6-7
6.10.2 Rationale	6-7
6.10.3 Status/Strategy	6-7
6.11 Cleanup Standards	6-7
6.11.1 BRAC Cleanup Team Action Items	6-7
6.11.2 Rationale	6-7
6.11.3 Status/Strategy	6-7
6.12 Initiatives for Accelerating Cleanup	6-8
6.13 Remedial Actions	6-9
6.14 Review of Selected Technologies for Application of Expedited Solutions	6-9
6.15 Hot Spot Removals	6-9
6.16 Identification of Clean Properties	6-9
6.16.1 BRAC Cleanup Team Action Items	6-9
6.16.2 Rationale	6-9
6.16.3 Status/Strategy	6-10
6.17 Overlapping Phases of the Cleanup Process	6-10
6.18 Improved Contracting Procedures	6-10
6.19 Interfacing with the Community Reuse Plan	6-10
6.20 Bias for Cleanup Instead of Studies	6-11
6.21 Expert Input on Contamination and Potential Remedial Actions	6-11
6.22 Presumptive Remedies	6-11
6.23 Partnering (Using Innovative Management, Coordination, and Communication Techniques)	6-12
6.24 Updating the EBS and Natural/Cultural Resources Documentation	6-12
6.25 Implementing the Policy for On-Site Decision Making	6-12
6.26 Air Emission Credits	6-13
6.27 Caretaking Responsibilities	6-13

7 References

APPENDICES

Appendix

- A Fiscal Year Funding Requirements/Costs
- B Installation Environmental Restoration Documents
 Summary Tables
- C Decision Document/Rod Summaries
- D No Further Response Action Planned Summaries
- E Conceptual Site Models

TABLES

Table	Page
ES-1 BCT/Project Team Action Items	ES-11
1-1 Current BCT/Project Team Members	1-11
1-2 History of Installation Operations	1-15
1-3 Hazardous Waste-Generating Activities	1-19
1-4 On-Base Tenant Units	1-27
1-5 Property Acquisition Summary	1-31
1-6 Off-Base Properties	1-33
2-1 Parcel Reuse Data Summary	2-7
2-2 Existing Legal Agreements/Interim Leases	2-11
3-1a Site Summary	3-43
3-1b Aerial Photograph Features/Anomalies	3-71
3-2 Preliminary Location Summary	3-75
3-3 Early Action Status	3-77
3-4 Mission/Operational-Related Compliance Projects	3-79
3-5 Closure-Related Compliance Projects	3-81
3-6 Compliance Early Action Status	3-83
3-7 Underground Storage Tank Inventory	3-85
3-8 Aboveground Storage Tank Inventory	3-121
3-9 Less-than-90-Day Accumulation Areas	3-123
3-10 PCB Transformer Inventory	3-129
3-11 Non-Transformer PCB Equipment	3-135
3-12 Buildings with Known Asbestos	3-137
3-13 Summary of SWMUs/AOCs	3-143
3-14 Oil/Water Separator Inventory	3-161
3-15 Vegetative Cover and Other Features Within Natural Area	3-173
3-16 Special-Status Wildlife Species at MCAS El Toro	3-175
3-17 Summary of Land Area by ECP Area Type	3-177
4-1a Relationship Between IRP Sites, OUs, and Parcels	4-17
4-1b Cleanup Sequence	4-19

Table of Contents

Table	Page
4-2 Environmental Restoration Planned Early Actions	4-21
4-3 Environmental Compliance Planned Early Actions	4-25
5-1 Project Team Meeting Schedule	5-3
6-1 Future Land Use Risk Assessment for Development of Remedy Selections.....	6-15
6-2 Human Health Standards.....	6-19
6-3 Surface Water Standards	6-21

FIGURES

Figure	Page
1-1 MCAS El Toro Location Map.....	1-35
1-2 Location of Past Hazardous Substance Activities	1-37
1-3 Existing Off-Base Land Use	1-39
1-4 History of Land Acquisitions	1-41
1-5 Off-Base Parcels.....	1-43
2-1 Potential Disposal and Reuse Parcels	2-15
3-1 Sites, Zones, and OUs Currently Under Investigation	3-179
3-2a Key to UST Location Maps	3-181
3-2b UST Locations.....	3-183
3-2c UST Locations.....	3-185
3-2d UST Locations.....	3-187
3-2e UST Locations.....	3-189
3-3a Vegetative Cover in Natural Area.....	3-191
3-3b Wetlands and Waters in Natural Area.....	3-193
3-3c Natural and Cultural Resources	3-195
3-4 Environmental Condition of Property.....	3-197
5-1 Master Program Schedule, Installation Restoration Program.....	5-5
5-2 Master Program Schedule, Mission-Related Compliance	5-7
5-3 Master Program Schedule, Closure-Related Compliance.....	5-9
5-4 Master Program Schedule, Natural/Cultural Resources Activity	5-11

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 1

Introduction

This document presents the Base Realignment and Closure (BRAC) Cleanup Plan (BCP) for Marine Corps Air Station (MCAS) El Toro (Station). This report was prepared in fulfillment of Contract Task Order (CTO)-103 issued by Southwest Division Naval Facilities Engineering Command (SWDIV) under the Comprehensive Long-Term Environmental Action Navy (CLEAN) II Program.

In March 1993, MCAS El Toro was placed on the proposed BRAC III list of military facilities considered for base closure. MCAS El Toro was formally selected for closure in September 1993. Closure of MCAS El Toro is planned to be completed by July 1999.

As a result of past waste management practices at MCAS El Toro, some areas are known or suspected to have become affected by various hazardous substances, pollutants, contaminants, or wastes. In response to these conditions, a number of environmental restoration programs have been performed and/or are ongoing at the Station. In addition, compliance programs are in place at the Station to assure that waste and resource management practices are conducted in a manner that protects human health and the environment.

The BCP summarizes the current status of the MCAS El Toro environmental restoration and compliance programs and provides a comprehensive strategy for implementing response actions necessary to protect human health and the environment. This strategy integrates activities performed under both the Installation Restoration Program (IRP) and the associated environmental compliance programs to support full restoration of the Station.

The initial version of the BCP was submitted to Naval Facilities Engineering Command (NAVFACENGCOM) on 21 March 1994. This version of the BCP was prepared based on information available as of 31 December 1995. The BCP is a dynamic planning document that will be updated annually. As such, information, schedules, and response actions presented in this document are subject to change. Because some of the currently available information is incomplete, certain assumptions and interpretations were made to develop strategies and cost estimates for future environmental work. As additional information becomes available, programs, schedules, and costs will change. The BCP will be updated to reflect changes that occur.

This BCP has been organized and prepared according to guidance presented in the BCP Guidebook (DoD 1993). The document is organized as follows.

Chapter 1 discusses the objectives of the environmental restoration program, the purpose of the BCP, the BRAC Project Team (Project Team), and the history of MCAS El Toro.

Chapter 2 provides a summary of the current status of the property disposal planning process for MCAS El Toro and describes the relationship of the disposal process with other environmental programs.

Chapter 3 summarizes the past history and current status of the IRP and environmental compliance programs at MCAS El Toro. This section also presents the environmental condition of property at the Station. The status of natural and cultural resources, as well as the community relations activities that have occurred to date, are also discussed.

Chapter 4 describes the Stationwide environmental restoration and compliance program strategy for MCAS El Toro. This chapter discusses current plans for remedial activities and other responses associated with the IRP sites and compliance program issues. This chapter also addresses the strategies for natural and cultural resources and public relations for the Station.

Chapter 5 provides master schedules of planned and anticipated activities to be performed throughout the duration of the MCAS El Toro environmental restoration program.

Chapter 6 presents discussions of specific technical and other issues associated with the environmental restoration that are yet to be resolved, and provides strategies for resolving these issues.

Chapter 7 contains references relevant to this BCP.

In addition to the main text of this document, the following appendices are included.

- Appendix A – Tabular summaries of funding requirements and past costs for the environmental restoration program.
- Appendix B – Listings of previous environmental restoration program deliverables by program and by site.
- Appendix C – Summaries of decision documents for remedial action selections for IRP sites. (Currently, none exist for MCAS El Toro.)
- Appendix D – Summaries of decision documents for no further response action decisions for IRP sites. (Currently, none exist for MCAS El Toro.)
- Appendix E – Conceptual site models for IRP sites.

1.1 ENVIRONMENTAL RESPONSE OBJECTIVES

The objectives of the environmental restoration program for MCAS El Toro are as follows.

- Expedite and improve environmental response actions to facilitate the disposal and reuse of MCAS El Toro property.
- Protect human health and the environment.
- Comply with existing federal, state, and local statutes and regulations.
- Conduct IRP activities in a manner consistent with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA).
- Meet the provisions of the Federal Facilities Agreement (FFA).
- Continue efforts to identify potentially contaminated areas.
- Establish priorities for environmental restoration and restoration-related compliance activities (so that property disposal and reuse goals can be met).
- Design schedules and estimate costs for performing remedial activities for IRP sites and compliance program issues.

- Identify and map areas suitable for transfer by deed/lease and areas unsuitable for transfer by deed.

1.2 BCP PURPOSE, UPDATES, AND DISTRIBUTION

The purpose of the BCP is to summarize the status of the MCAS El Toro environmental restoration and compliance programs and to provide a comprehensive strategy for addressing environmental restoration and restoration-related compliance activities. The BCP provides schedules of restoration activities in support of Station closure. In addition, it defines the status of efforts to resolve technical issues so that continued progress and implementation of scheduled activities can occur.

The BCP will be updated and modified annually to reflect status, strategy, and schedule changes, as well as issue resolution.

The BCP document and subsequent update materials will be distributed to the BRAC Cleanup Team (BCT) and identified interested parties. Updated BCP documents will also be kept at the MCAS El Toro information repository locations. Currently, two repositories for MCAS El Toro restoration information have been designated: Heritage Park Public Library located in Irvine, California, and MCAS El Toro Library located on the Station. An additional repository may be identified off the Station when it is closed.

1.3 BRAC CLEANUP TEAM/PROJECT TEAM

The MCAS El Toro BCT was established in October 1993. The responsibilities of the BCT include management of the BCP process and preparation of the MCAS El Toro BCP. The BCT will also serve as the decision-making body for the efforts of the Project Team. Members of the BCT include representatives from the Department of the Navy (DON)/United States Marine Corps (USMC), United States Environmental Protection Agency (U.S. EPA), and the California Environmental Protection Agency (Cal-EPA) Department of Toxic Substances Control (DTSC). The DON representative serves as the BRAC Environmental Coordinator (BEC).

The BCT is supported by the Project Team, which is composed of individuals capable of providing technical, operational, reuse, and administrative assistance. Table 1-1 (Current BCT/Project Team Members) identifies the BCT and Project Team members, along with their roles and responsibilities.

1.4 BRIEF HISTORY OF INSTALLATION

The following sections present a summary of the background, site history, and environmental setting for MCAS El Toro. Included is information on activities that may have contributed to environmental contamination at the Station.

1.4.1 Site Location

MCAS El Toro is located in south-central Orange County, California, about 7 miles east of MCAS Tustin (Figure 1-1, MCAS El Toro Location Map). MCAS El Toro is bordered on the northwest, south, and west by the city of Irvine and on the east by the

city of Lake Forest. The exact location of MCAS El Toro is 33° 38' to 33° 41' north latitude, 117° 41' to 117° 45' west longitude, Township 6 South, Range 6 West (T6S/R6W) (Sections 2–5, 7–11, 16–17, 20–21) and T5S/R8W (Sections 32–33, 35).

MCAS El Toro encompasses approximately 4,738 acres (about 7.4 square miles). Approximately 800 acres of Station property are currently designated for agricultural outleases. Agricultural outleased lands are located at the corners of the Station and are used for plant nurseries and crop production. Crops grown on the Station include strawberries, winter celery, tomatoes, and oranges (MCAS El Toro 1991).

1.4.2 Site History

Construction of a USMC pilots fleet operational training facility began in July 1942 on 2,319 acres in Orange County, California. On 17 March 1943, that facility was commissioned as MCAS El Toro. In 1950, the Station was selected for development as a master jet air station and permanent center for Marine aviation on the West Coast to support the operations and combat readiness of Fleet Marine Forces, Pacific. Between 1944 and 1986, an additional 2,419 acres of land were acquired to bring the Station to its current size of 4,738 acres.

The mission of MCAS El Toro has been to maintain and operate facilities and to provide services and material to support the operation of aviation activities and the units of the operating forces of the USMC. MCAS El Toro also provides support for other activities designated by the Commandant of the Marine Corps, in coordination with the Chief of Naval Operations. MCAS El Toro is currently expediting the closure of MCAS Tustin by using empty spaces to house jets and helicopters departing from Tustin.

A history of operations at the Station is provided in Table 1-2 (History of Installation Operations). This table also summarizes past hazardous substance activities at the Station. The locations of these activities are shown in Figure 1-2 (Location of Past Hazardous Substance Activities).

The mission of MCAS El Toro has involved the operation and lower-echelon maintenance of military aircraft and ground-support equipment. An inventory of hazardous wastes generated at the Station during 1993 is provided in Table 1-3 (Hazardous Waste-Generating Activities). The generation of hazardous wastes resulted from operations at various locations throughout the Station, including:

- aircraft maintenance hangars;
- maintenance shops for automobiles, aircraft ground-support equipment, vehicle equipment, and construction equipment;
- auto hobby shop and Marine Corps Exchange auto repair station;
- wash racks and steam-cleaning facilities;
- hazardous, flammable, and unused chemical materials storage areas; and
- aircraft fueling stations, tactical airfield fuel dispensing system (TAFDS), and fuel farms.

Hazardous wastes typically generated from aircraft and vehicle maintenance, degreasing processes, and painting include waste oil, fuels, hydraulic fluid, lube oil, antifreeze, cleaning solvents, paints, paint stripper, paint thinner, batteries, and contaminated rags and absorbents. Hazardous waste is also generated at the fuel storage areas when fuel storage tanks are cleaned and sludge is pumped out, or when fueling/defueling or loading/unloading operations result in spills.

Wash water from wash racks passes through oil/water separators (OWSs). The effluent water is discharged to the sanitary sewer or the storm drain, and the waste oil is handled as hazardous waste. OWSs are located at various buildings throughout the Station.

Detailed below are previous operations at MCAS El Toro that were or may have been significant in past waste generation and disposal procedures.

- For approximately six months during the 1940s, aircraft refurbishing operations were conducted in the southwest portion of the Station and were centered in Buildings 296, 297, and 324. Refurbishing operations consisted of cleaning and plating activities that may have included the use of solvent materials. (The types of materials used in the tanks are unknown.) Wastewater from this six-month operation was discharged to currently abandoned industrial wastewater sewer lines and treated at the former Industrial Wastewater Treatment Plant. Based on aerial photographs, this plant existed in the 1940s and was demolished by 1965.
- Sewage was treated at an on-Station plant constructed in 1943, abandoned in 1972, and demolished in the late 1970s.
- Incineration was performed at a facility operated between 1943 and 1955 to burn municipal-type waste generated by Station housing and other activities. The purpose of the incinerator was to reduce waste volume. Ash from the incinerator was disposed in the Original Landfill (IRP Site 3).
- Solid waste was disposed at four landfills on the Station. The Original Landfill was operated from 1943 to 1955 and received wastes, including municipal solid waste, paint residues, oily wastes, and industrial solvents. Ash from an incinerator formerly located adjacent to the landfill was also disposed at this site. Perimeter Road Landfill (IRP Site 5) operated from 1955 to the late 1960s and received municipal solid waste, unspecified fuels, solvents and cleaning fluids, scrap metals, paint residues, and unspecified oily wastes. Solid wastes were burned in place at the Perimeter Road Landfill for volume reduction. After open burning at the Station was discontinued in the late 1960s, garbage was transported to Magazine Road Landfill (IRP Site 2), where it was landfilled through 1980. Materials landfilled at this site included municipal solid wastes, unspecified industrial wastes, lead batteries, transformers, various petroleum wastes, and industrial solvents.
- Two burn pit areas were operated for fire-fighting training exercises. Crash Crew Pit No. 1 (IRP Site 9), located in the southwest portion of the Station, was operated from 1965 through 1971. Crash Crew Pit No. 2 (IRP Site 16), located near the center of the Station, was operated from 1972 to about

1975. The sites consisted of unlined pits that were filled with water and layered with various flammable liquids including JP-5 fuel, aviation gasoline, and other waste liquids. A third lined burn pit area is currently operational.

- Pesticides/herbicides have historically been used at the Station to control rodents and weeds. Chemicals used in the past include Thurshan, Diazonan™, chlordane, Crovar, malathion, Kelthane, strychnine, dichlorodiphenyltrichloroethane (DDT), and Retard-X.

1.4.3 Environmental Setting

Climate. The climate at MCAS El Toro is a typical Mediterranean climate, which is characterized by cool, moist winters and warm, dry summers. Temperatures in the winter seldom drop below 37 degrees Fahrenheit (°F). Summer temperatures rarely exceed 100°F. Average annual precipitation is about 12 inches and occurs primarily in the winter.

Early morning light fog and low clouds are common in the late spring and early summer. Dry winds, known as Santa Ana Winds, with velocities up to 70 miles per hour, occur for short periods during the late fall and early winter (Brown and Caldwell 1986).

Setting and topography. MCAS El Toro is situated on the southeastern edge of the Tustin Plain, a gently sloping surface of alluvial fan deposits derived mainly from the Santa Ana Mountains (Yerkes et al. 1965). The Tustin Plain, bounded on the north and east by the Santa Ana Mountains and on the south by the San Joaquin Hills, is at the southeast end of the Los Angeles Basin (the Basin), a large sedimentary basin in the Peninsular Ranges Geologic Province (Yerkes et al. 1965). The Plain also lies in the so-called "Central Block" of the Basin, which is bound on the north by the Whittier Fault zone and on the south by the Newport-Inglewood Fault zone (CDMG 1984).

The MCAS El Toro boundaries extend across the Tustin Plain into the Santa Ana Mountains. Most of the Station slopes gently down to the west-southwest. Elevations range from about 215 feet above mean sea level (MSL) in the west corner of the facility to about 800 feet above MSL in the east corner in the foothills of the Santa Ana Mountains. The Santa Ana Mountains rise steeply north and east of the Station; their highest peak (6,698 feet) is 10 miles east of the Station. The San Joaquin Hills slope up gradually to the south; their highest point (1,170 feet above MSL) is 10 miles south of the Station (Brown and Caldwell 1986). The land to the northwest of the Station is relatively level.

Surface water. Surface drainage near MCAS El Toro generally flows southwest, following the slope of the land perpendicular to the trend of the Santa Ana Mountains. Several washes originate in the hills northeast of the Station and flow through or adjacent to the Station en route to San Diego Creek. Off-Station drainage from the hills and upgradient irrigated farmlands combines with on-Station runoff (generated from the Station's extensive paved surfaces) at the Station and flows into

four main drainage channels. Three of these drainage channels are contiguous with natural washes that originate in the Santa Ana Mountains (Borrego Canyon, Agua Chinon, and Bee Canyon); the fourth channel is Marshburn Channel. All four drainages become confluent with San Diego Creek southwest of the Station.

Geology. MCAS El Toro lies on alluvial fan deposits derived mainly from the Santa Ana Mountains. These Holocene materials consist of isolated coarse-grained stream channel deposits contained within a matrix of fine-grained overbank deposits that range in thickness up to a maximum of 300 feet (Herndon and Reilly 1989).

The Holocene alluvial materials conformably overlie Pleistocene Age sediments predominantly composed of interlayered fine-grained lagoonal and near-shore marine deposits. These materials become increasingly mixed with beach sands, terrace, and stream-channel deposits in the eastern portion of the Tustin Plain and along the plain margins. Thus, the Quaternary deposits form a heterogeneous mixture of silts and clays with interbedded sands and fine gravels that range in thickness up to 500 feet in the western portion of the Tustin Plain (Singer 1973).

The deeper Quaternary sediments may be equivalent to the lower Pleistocene San Pedro Formation, which consists of semiconsolidated silts, clays, and sands with interbedded limestone. These lagoonal and shallow marine deposits are considered to be a major water-bearing unit in the region (Brown and Caldwell 1986).

The Pleistocene deposits unconformably overlie older semiconsolidated marine sandstones, siltstones, and conglomerates of late Miocene to late Pliocene age. These Miocene to Pliocene deposits are divided into the Niguel, Fernando, and Capistrano Formations and are considered as bedrock near MCAS El Toro. The lower Pliocene Fernando Formation, considered to be the major aquifer in the Irvine area, is the base of the water-bearing units (Herndon and Reilly 1989). This formation probably interfingers with marine clayey and sandy siltstones of the Capistrano and Niguel Formations west of MCAS El Toro, which together range up to 1,500 feet in thickness (JMM 1988).

Beneath the semiconsolidated rocks lies a thick sequence of interbedded marine and nonmarine sedimentary rocks and volcanic rocks of the Monterey, Puente, Vaqueros, and Sespe Formations. These units, which are deposited on a basement of crystalline metamorphic and igneous rocks, have been considered to be nonwater-bearing in previous studies (JMM 1988).

Groundwater. MCAS El Toro is situated over the Irvine Subbasin in the Main Orange County Basin. Although the aquifers beneath the Tustin Plain are in hydraulic contact with the Main Orange County Groundwater Basin, it is difficult to make correlations among specific aquifer zones. In the Irvine area, aquifers are much thinner and separated by thicker sequences of fine-grained materials (Banks 1984). Aquifers tend to be composed of lenticular clayey and silty sands and fine gravels contained within a complex assemblage of sandy clays and sandy silts. Thus, rather than identifiable aquifers that may be correlated from place to place, the groundwater

may be considered to flow in a single, large-scale heterogeneous system (Herndon and Reilly 1989).

The groundwater system beneath the Irvine Subbasin has been divided into a forebay area and a pressure area. The forebay area lies along the margin of the Basin where relatively shallow and coarse-grained sediments overlie semiconsolidated rock. Groundwater is thought to occur under unconfined conditions in this area. Recharge to the regional system takes place in the forebay area, primarily along washes that exit the Santa Ana Mountains. The pressure area lies in the central portion of the basin, where sediments are thicker and relatively finer-grained. Productive aquifers in this area are present mainly in deeper zones that become increasingly confined with depth.

The groundwater has historically been discharged through irrigation wells or has moved westward to the Main Orange County Basin (Banks 1984).

In 1988, along the southwest perimeter of the Station, the depth to groundwater ranged from 82 to 122 feet bgs (JMM 1988). Reduced pumping and increased water imports in the past 20 years have allowed groundwater levels to rise as much as 100 feet (Herndon and Reilly 1989). Groundwater within the foothills, where it occurs, is reported to be within 50 feet of the ground surface (JMM 1988). Information gathered during Phase I Remedial Investigation (RI) drilling shows that depth to groundwater is generally consistent with those above. Groundwater is most shallow in the foothills, where it lies about 45 to 60 feet beneath the washes.

According to 1989 water levels, the direction of flow along the southwest boundary of MCAS El Toro was northwest at a gradient of 0.0066 (JMM 1988). Regional flow has been west and northwest since the 1940s and has been controlled locally by large pumping depressions. Phase I RI data indicate that regional groundwater flow is still toward the northwest, with an average groundwater gradient of about 0.008.

The average linear groundwater flow velocities in the uppermost aquifer across the Station are in the range of 0.02 to 1.9 feet per day (ft/day). Average linear groundwater flow velocities in localized areas in the deeper coarse-grained portion of the aquifer that supplies groundwater to production wells are likely to be higher than the linear groundwater velocity in the uppermost aquifer. An average linear groundwater velocity of 1.5 ft/day was calculated based on the hydraulic conductivity of 56.8 ft/day estimated from a 24-hour pumping test completed by Orange County Water District (OCWD) (Geotechnical Consultants, Inc. 1993), an average hydraulic gradient of 0.008, and a porosity of 0.3.

Groundwater chemistry. In addition to the regional volatile organic compound (VOC) groundwater contamination being investigated at the Station (refer to Section 3.1.1), historical degradation of shallow groundwater quality associated with other contaminants has occurred in the Irvine area. Increases in the levels of total dissolved solids (TDS), selenium, and nitrates in the groundwater have been related to agricultural activities and incursions of lower-quality water from the margins of the Basin under the influence of pumping wells. The largest area of groundwater not affected by this contamination lies in deeper zones in the central pressure area of the Basin (Banks 1984).

Investigations by OCWD northwest of the Station have revealed the presence of three hydrochemical facies in groundwater related to depth in the aquifer. The first facies, characteristic of shallow groundwater lying within 200 feet of the ground surface, contains relatively high levels of TDS and nitrate, and is dominated by calcium and sulfate ions. The second facies, characteristic of groundwater lying between 200 and 450 feet deep, contains lower levels of TDS and nitrate, and is dominated by sodium, calcium, and bicarbonate ions. The off-Station VOC contamination has occurred in this zone. The third facies lies within the lower hydrogeologic system at depths greater than 450 feet, contains relatively high levels of TDS and relatively low levels of nitrate, and is dominated by sodium and sulfate ions (Herndon and Reilly 1989). Preliminary work performed at MCAS El Toro by James M. Montgomery Engineers (JMM) and Phase I RI data have generally confirmed these findings (JMM 1988; Jacobs 1993a).

1.5 OFF-BASE PROPERTY/TENANTS

The following discussion presents information regarding on-Station tenants, existing off-Station land use, historic property acquisitions, and off-Station properties.

Tenant units. A list of major tenants and their building locations at MCAS El Toro is provided in Table 1-4 (On-Base Tenant Units). The buildings occupied by each tenant are also provided in this table. However, due to the continuing transfer of military units at MCAS Tustin and MCAS El Toro, the current status of tenants occupying property at MCAS El Toro is not reflected in this document. Tenant unit listings have not been updated as of March 1995. Noncomponent (e.g., Federal Aviation Administration [FAA]) tenants are not undertaking any environmental restoration activities.

Existing off-base land use. Historically, the land use around MCAS El Toro has been largely agricultural. However, land to the south, southeast, and southwest has been developed recently as commercial, light industrial, and residential. Currently expanding commercial areas include the Irvine Industrial Complex-East, located on the southeast border of the Station, and the Irvine Technology Center, located along the southwest border of the Station. Adjacent land on the northwest and northeast is used for agriculture. Regional land use around the Station is shown in Figure 1-3 (Existing Off-Base Land Use).

Property acquisitions. MCAS El Toro has more than doubled in size since the original acquisition of 2,319 acres in 1942. The Station currently consists of 4,738 acres. A summary of MCAS El Toro property acquisitions is provided in Table 1-5 (Property Acquisition Summary). The tracts referenced in this table correspond to Figure 1-4 (History of Land Acquisitions).

Off-base property. MCAS El Toro currently uses property located off Station property. The property, listed in Table 1-6 (Off-Base Properties), consists of a recreation facility (Big Bear Recreation Facility).

The Big Bear Recreation Facility consists of 6.5 acres and is located approximately 75 miles northeast of the Station in Big Bear, California. This property is used by the

Station under a Memorandum of Understanding (MOU) with the U.S. Forest Service; the Marine Corps owns the facilities on the property. These facilities are administered by the MCAS El Toro Morale, Welfare, and Recreation (MWR) Office. The Marine Corps plans to extend the MOU after MCAS El Toro is closed (Horner, pers. com. 1994).

Table 1-1
Current BCT/Project Team Members
(Sheet 1 of 3)

Name	Title/Organization	Phone	Role/Responsibility
BCT Members			
Joyce, Joseph	BRAC Environmental Coordinator - MCAS El Toro and Navy Southwest Division Naval Facilities Engineering Command (SWDIV)	714/726-3470 619/532-3873 fax: 714/726-6586	Department of Defense Component Project Manager (Lead Agency)
Arthur, Bonnie	Project Manager - U.S. Environmental Protection Agency (U.S. EPA), Region IX	415/744-2368 fax: 415/744-4916	U.S. EPA Region IX, Lead
Mahmoud, Tayseer	Project Manager - California EPA (Cal-EPA) Department of Toxic Substances Control (DTSC)	310/590-4891 fax: 310/590-4932	Cal-EPA DTSC, Lead
Other Key Participants			
Baynard, Major Frank	MCAS El Toro BRAC Office	714/726-3389 fax: 714/726-3394	El Toro Closure Project Manager
Bevis, Lt. Col. Dennis	MCAS El Toro	714/726-6610	DY Chief of Staff Environmental and Safety
Broussard, Theodoris	SWDIV	619/532-3687 fax: 619/532-2469	Contract Specialist
Carrier, Terry	Orange County Health Care Agency	714/667-3679 fax: 714/972-0749	Underground Storage Tank Program Oversight
Ciesla, Pete	MCAS El Toro BRAC Office	714/726-3389 fax: 714/726-3394	Assistant Base Transition Coordinator
Crawley, David	SWDIV	714/726-4146 fax: 714/726-2255	Fieldwork Coordination and Logistics
Dotson, Ann	COMCABWEST	714/726-6599 fax: 714/726-2639	MCAS El Toro Planning Director
Potacka, Marianna	BRAC Environmental Program Manager - Marine Corps Headquarters	703/696-2138 fax: 703/696-1020	CMC Marine Corps Headquarters
Dunbar, DeAnna	SWDIV	619/532-2446 fax: 619/532-2469	RPM, BCP Update
Felter, Fraser	U.S. EPA	800/231-3075	Community Relations Coordinator

Table 1-1
Current BCT/Project Team Members
(Sheet 2 of 3)

Name	Title/Organization	Phone	Role/Responsibility
Fowler, Captain Brad	MCAS El Toro, Installations	619/726-2369 fax: 714/726-2369	MCAS El Toro Assistant Chief of Staff, Installations
Garelick, Virginia	SWDIV	619/532-2962 fax: 619/532-2469	Remedial Technical Manager, Technical Support
Hornecker, Lynn	SWDIV	619/532-3737 fax: 619/532-2469	RPM, Compliance Program Issues
Katcharian, Lt. Hope	MCAS El Toro	714/726-6607 fax: 714/726-6586	MCAS El Toro Director, Environmental Department
Lee, Wayne	MCAS El Toro, Installations	714/726-3705 fax: 714/726-6586	MCAS El Toro Chief of Staff, Environmental and Safety
Lowery, Richard	SWDIV	619/532-3345	RPM, Compliance Program Issues
Matthews, Thomas B.	El Toro LRA - Airport Citizens Advisory Committee	714/834-4643 fax: 714/834-2771	Director of Planning EMA
Mingay, Marsha	DTSC	310/590-4881 fax: 310/590-4932	Public Participation Specialist
Nuzum, Larry	BRAC Branch Manager - SWDIV	619/532-3655 fax: 619/532-2469	MCAS El Toro Remedial Program Manager (RPM), Operable Units 2 and 3
Okuda, Ron	DTSC	310/590-4885 fax: 310/590-4901	Environmental Assessment and Reuse Specialist
Parpiani, Vish	MCAS El Toro, Environmental Office	714/726-4432 fax: 714/726-6586	Installation Restoration Program Manager
Piszkin, Andy	SWDIV	619/532-2635 fax: 619/532-2469	Lead RPM/Technical Support
Ritchie, Colonel Jim	MCAS El Toro, BRAC	714/726-3389 fax: 714/726-3394	AC/S BRAC Base Transition Coordinator
Rumsey, Ed	MCAS El Toro, Installations	714/726-2270 fax: 714/726-2639	MCAS El Toro Director, Engineering Division
Sherwood, Paul	MCAS El Toro, Installations	714/726-6807 fax: 714/726-2639	Operations Manager
Vitale, Larry	Project Manager - Cal-EPA, Regional Water Quality Control Board (RWQCB), Santa Ana	909/782-4998 fax: 909/781-6288	RWQCB - Santa Ana, Lead

Table 1-1
Current BCT/Project Team Members
(Sheet 3 of 3)

Name	Title/Organization	Phone	Role/Responsibility
Wiemert, Carole (Charly)	MCAS El Toro, Environmental Office, IRP Department	714/726-2840 fax: 714/726-6586	Environmental Program Support Specialist
Wilson, Barbara	COMCABWEST	714/726-6611 fax: 714/726-2369	Natural/Cultural Resources/NEPA
Contractors			
Brooks, George P. (Pat)/ Kleinfelder	Navy - SWDIV	619/687-8851 fax: 619/687-8787	CLEAN II CTO Leader
Carlisle, Craig/ Bechtel	Navy - SWDIV	619/687-8804 fax: 619/687-8787	CLEAN II CTO Leader
Cowser, Dave/ Bechtel	Navy - SWDIV	619/687-8802 fax: 619/687-8787	CLEAN II El Toro Project Manager
Hallerbach, Dimitri/ Bechtel	Navy - SWDIV	619/687-8855 fax: 619/687-8787	CLEAN II BCP Lead (CTO Leader)
Latas, Tim/ Kleinfelder	Navy - SWDIV	619/687-8848 fax: 619/687-8787	CLEAN II CTO Leader
Lord, Jaques/ Bechtel	Navy - SWDIV	619/687-8803 fax: 619/687-8787	CLEAN II CTO Leader
Lyons, Katrina/ Kleinfelder	Navy - SWDIV	619/687-8843 fax: 619/687-8787	CLEAN II El Toro Staff
Schwartz, Amy/ Bechtel	Navy - SWDIV	415/768-7790 fax: 415/768-4898	CLEAN II CTO Leader
Sedlak, Bill/ OHM	Project Manager/OHM Remediation Services	714/263-1146 fax: 714/263-1147	SWDIV Remedial Action Contract Project Manager
Tedaldi, Dante/ Bechtel	Navy - SWDIV	619/687-8780 fax: 619/687-8787	CLEAN II Technical Consultant

Abbreviations: BCT – Base Realignment and Closure (BRAC) Cleanup Team
 BRAC – Base Realignment and Closure
 DTSC – Department of Toxic Substances Control
 RPM – Remedial Project Manager
 COMCABWEST – Commander, Marine Corps Air Bases Western Area
 CMC – Commandant of the Marine Corps
 RWQCB – Regional Water Quality Control Board
 NEPA – National Environmental Policy Act
 IRP – Installation Restoration Program
 CLEAN – Comprehensive Long-Term Environmental Action Navy
 CTO – Contract Task Order

THIS PAGE INTENTIONALLY LEFT BLANK

Table 1-2
History of Installation Operations
(Sheet 1 of 4)

Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference ¹
Pre-1943	Agricultural	None	Potential pesticide use	VL
1943	New construction MCAS El Toro formally commissioned	None	Construction Landfilling STP and sludge drying beds Fuel/oil/chemical storage Discharge to washes Waste burning	VL 1 2 VL 3 8
1943 to 1945	465 aircraft assigned (F4U, TBM, R5C, C-54, SNJ) 15,470 personnel assigned	Fighter, Bombing, and Training Aircraft	Construction Landfilling Fuel/oil/chemical storage STP and sludge drying beds Discharges to washes UST petroleum/waste storage Oil/water separators Aircraft refurbishing operations Waste burning IWTP	VL 1 VL 2 3 VL VL 4 8 9
1946 to 1952	Marine aircraft groups assigned Aircraft (F4U, F7F, TBM, C-54, SNJ) 4,000 personnel assigned	Fighter, Bombing, Transport, and Training Aircraft	Petroleum disposal area Landfilling Fuel/oil/chemical storage STP and sludge drying beds Discharges to washes UST petroleum/waste storage Oil/water separators Aircraft refurbishing operations Waste burning IWTP	5 1 VL 2 3 VL VL 4 8 9

**Table 1-2
History of Installation Operations
(Sheet 2 of 4)**

Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference ¹
1952 to 1955	Aircraft fleet marine force assigned Marine aircraft groups assigned Aircraft (F3D, F9F, F6F, C-119, C-54, AD, HRS)	Fighter, Attack, Transport, Training Aircraft, and Helicopters	Explosive ordnance disposal	6
			Petroleum disposal area	5
			Landfilling	1
			Fuel/oil/chemical storage	VL
			STP and sludge drying beds	2
			Discharges to washes	3
			UST petroleum/waste storage	VL
			Oil/water separators	VL
			Waste burning	8
1955 to 1960	One marine air wing (3d MAW relocated to MCAS El Toro from Miami, Florida) Aircraft (AD, A4D, F3D, F4D, F8U, F9F, C-119, C-54)	Fighter, Attack, Transport, Photographic, Reconnaissance, and Tanker Aircraft	IWTP	9
			Explosive ordnance disposal	6
			Petroleum disposal area	5
			Landfilling	1
			Fuel/oil/chemical storage	VL
			STP and sludge drying beds	2
			Discharges to washes	3
			UST petroleum/waste storage	VL
			Oil/water separators	VL
1961 to 1975	One marine air wing (3d MAW) Aircraft (AD, A4D, F4H, C-130) 8,600 personnel assigned	Fighter, Attack, and Tanker Aircraft	Waste burning	8
			IWTP	9
			Explosive ordnance disposal	6
			Petroleum disposal area	5
			Landfilling	1
			Fuel/oil/chemical storage	VL
			STP and sludge drying beds	2
			Discharges to washes	3
			UST petroleum/waste storage	VL
			Oil/water separators	VL
			Fire training area burn pits	7

Table 1-2
History of Installation Operations
(Sheet 3 of 4)

Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference ¹
1976 to 1985	One Marine Air Wing (3d MAW) Aircraft (A4D, F4H, C-130)	Fighter, Attack, and Tanker Aircraft	Explosive ordnance disposal Petroleum disposal area Landfilling Fuel/oil/chemical storage Discharges to washes UST petroleum/waste storage Oil/water separators Fire training burn pits	6 5 1 VL 3 VL VL 7
1986 to 1991	One Marine Air Wing (3d MAW). Includes: MAG -11 90 F/A-18 fighter attack aircraft 12 KC-130 MAG -46 12 F/A-18 fighter attack aircraft 12 aircraft (CH-46) Station 3 aircraft (UH-1) 3 aircraft (UC-12) 1 aircraft (CT-39) 7,200 personnel assigned	Fighter, Attack, and In-flight Refueler Aircraft, Helicopters and Logistic Transport	Petroleum disposal area Fuel/oil/chemical storage Discharges to washes UST petroleum/waste storage Oil/water separators Fire training burn pits	5 VL 3 VL VL 7
1991 to 1995	One Marine Air Wing (3d MAW). Includes: MAG -11 125 F/A-18 fighter attack aircraft 12 KC-130 MAG -46 12 F/A-18 fighter attack aircraft (Reserve) 12 CH-46 helicopters	Fighter, Attack, and In-flight Refueler Aircraft, Helicopters and Logistic Transport	Fuel/oil/chemical storage Discharges to washes UST petroleum/waste storage Oil/water separators Petroleum disposal area Fire training burn pits	VL 3 VL VL 5 7

Table 1-2
History of Installation Operations
(Sheet 4 of 4)

Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference ¹
	Station UH-1 search and rescue helicopter UC-12, CT-39 logistic aircraft 8,000 personnel assigned			
1995 to present	One Marine Air Wing (3d MAW). Includes: MAG -11 48 F/A-18 fighter attack aircraft 12 KC-130 aerial refueler/transport aircraft MAG -16 48 CH46 transport helicopters Station UH-1 search and rescue helicopter UC-12 , CT-39 logistic aircraft 6,581 personnel assigned (civilians included)	Fighter, Attack, and In-flight Refueler Aircraft, Helicopters and Logistic Transport	Fuel/oil/chemical storage Discharges to washes UST petroleum/waste storage Oil/water separators Petroleum disposal area Fire training burn pits	VL 3 VL VL 5 7

Sources: MCAS El Toro Master Plan, 1991
MCAS El Toro & Tustin Unofficial Guide and Directory, 1992
MCAS El Toro Command Museum Personnel

Notes: ¹ reference numbers correspond to locations shown in Figure 1-2

Abbreviations: VL – various locations
STP – Sewage Treatment Plan
UST – underground storage tank
IWTP – industrial wastewater treatment plant

Table 1-3
Hazardous Waste-Generating Activities
(Sheet 1 of 7)

Facility (Building)¹	Activity	Name of Waste Material	Generation Rate (lb./2 months)²	Disposition
Aero Club (10)	Small aircraft maintenance, (G, TAA)	Aviation gas	660	DRMO
Auto Hobby Shop (626)	Auto repair shop (G, TAA)	Absorbent w/fuel, oil Miscellaneous paints Oil filters Antifreeze Cleaning compound	518 264 736 544 266	DRMO
C-Pool (386)	Base auto and truck repair shop (G, TAA)	Gas fuses/filters	119	DRMO
CSSD-14 (388)	Hum V/support engine repair station (G, TAA)	Petroleum oil w/water Aerosol prime coating Aerosol vinyl spray Absorbent w/fuel, oil Petroleum oil w/solvents Petroleum oil w/fuel PD-680 Antifreeze Rags w/fuel, oil	368 53 52 2,564 996 178 124 260 1,104	DRMO
FMD (370)	Maintain base/buildings (G, TAA)	Paint remover Miscellaneous paint Enamel paint Spill debris w/oil Epoxy polyimide paint Antifreeze	5,503 55 145 65 14 98	DRMO
Fuels Division (314)	Gas and diesel supply to units (G, TAA)	Aviation turbine engine filters	937	DRMO
MTACS-38 (22)	Ground control unit (G, TAA)	Used oil/diesel filters Paint thinner Batteries (mercury) Calcium hypochlorite Rags w/fuel, oil Petroleum oil Antifreeze	98 203 74 52 102 332 338	DRMO
MACG-38 (5)	Transportation and power electricity for MATCS-38 (G, TAA)	Antifreeze Aerosol spray paint Miscellaneous paint Soil w/fuel, oil	178 94 368 224	DRMO

Table 1-3
Hazardous Waste-Generating Activities
(Sheet 2 of 7)

Facility (Building)¹	Activity	Name of Waste Material	Generation Rate (lb./2 months)²	Disposition
MAG-46 Helo (295)	Helicopters (G, TAA)	Rags w/fuel, oil	410	DRMO
		Rags w/synthetic oil	145	
		Petroleum oil	878	
		PD-680	314	
		Acidic cleaning compound	684	
		Plastic w/oil	116	
		Absorbent w/fuel, oil	1,523	
		Aerosol paint	124	
		Synthetic oil	868	
		Rags w/sealing compound	152	
		Plastic w/sealing compound	475	
HMM 161 (115)	Helicopters (G, TAA)	Rags w/fuel, oil	410	DRMO
		Rags w/synthetic oil	145	
		Petroleum oil	878	
		PD-680	314	
		Acidic cleaning compound	684	
		Plastic w/oil	116	
		Absorbent w/fuel, oil	1,523	
		Aerosol paint	124	
		Synthetic oil	868	
		Rags w/sealing compound	152	
		Plastic w/sealing compound	475	
HMM 163 (606)	Helicopters (G, TAA)	Rags w/fuel, oil	410	DRMO
		Rags w/synthetic oil	145	
		Petroleum oil	878	
		PD-680	314	
		Acidic cleaning compound	684	
		Plastic w/oil	116	
		Absorbent w/fuel, oil	1,523	
		Aerosol paint	124	
		Synthetic oil	868	
		Rags w/sealing compound	152	
		Plastic w/sealing compound	475	
HMM 364 (605)	Helicopters (G, TAA)	Rags w/fuel, oil	410	DRMO
		Rags w/synthetic oil	145	
		Petroleum oil	878	
		PD-680	314	
		Acidic cleaning compound	684	
		Plastic w/oil	116	
		Absorbent w/fuel, oil	1,523	
		Aerosol paint	124	
		Synthetic oil	868	
		Rags w/sealing compound	152	
		Plastic w/sealing compound	475	

Table 1-3
Hazardous Waste-Generating Activities
(Sheet 3 of 7)

Facility (Building)¹	Activity	Name of Waste Material	Generation Rate (lb./2 months)²	Disposition
MALS-11 Airframes (130)	Painting/tire shop/ welding (G,TAA)	Rags w/oil	688	DRMO
		Petroleum oil	316	
		Paint booth sludge	6,670	
		Aerosol lacquer paints	154	
		Miscellaneous paints	328	
		Paint stripper	328	
MALS-11 (441)	Maintain aviation logistic squadron (G, TAA)	Aircraft paint thinner	50	DRMO
		Methyl ethyl ketone	24	
		Absorbent w/fuel, oil	554	
		Rags w/fuel, oil	250	
		Freon	150	
		Batteries (magnesium/alkaline)	100	
MALS-11 Avionics (856)	Repair avionics equipment (G, TAA)	Batteries (mercury)	100	DRMO
		Sulfuric acid spent	538	
		Rags w/fuel, oil	343	
		Rainwater w/oil	3,830	
		Batteries (lead acid)	126	
		Synthetic oil	145	
		Paint thinner	66	
		Rags w/PD-680	56	
		Corrosion preventative compound	138	
		Miscellaneous paint	185	
		Primer	47	
		Sealing compound	39	
		Petroleum oil	269	
		Aerosol enamel paint	108	
		Alodine corrosive resistant	37	
MALS-11 Cryogenics (636)	Repair life emergency support equipment (G, TAA)	Absorbent w/hydraulic fluid	49	DRMO
		Aerosol cleaning compound	97	
MALS-11 GSE North (392)	Ground equipment provide power/test electrical system/ service hydraulics fuels/start engine/ maintain and tow tractors (G, TAA)	Petroleum oil	146	DRMO
		Oil w/antifreeze	199	
		Synthetic oil	474	
		Used oil/diesel filters	218	
		Latex gloves w/synthetic oil	52	
		Petroleum oil w/synthetic oil	230	
		25% Freon w/75% hydraulic fluid	436	
		Aerosol cleaning compound	35	
		Rags w/fuel, oil	252	

Table 1-3
Hazardous Waste-Generating Activities
(Sheet 4 of 7)

Facility (Building)¹	Activity	Name of Waste Material	Generation Rate (lb./2 months)²	Disposition
MALS-11 Ordnance (442)	Explosives/bomb build work support equipment/carry ammunition/ support armory (G, TAA)	Rags w/grease	108	DRMO
		Corrosion preventative compound	44	
		Aerosol lacquer paint	118	
		Rags w/oil	373	
		Petroleum oil	269	
		Aerosol enamel paint	108	
		Alodine corrosive resistant	138	
		Absorbent w/hydraulic fluid	49	
		Aerosol cleaning compound	97	
MALS-11 Power plants (634)	Fix and maintain F404 and T54 Engine (G, TAA)	Rags w/fuel, JP-5, synthetic oil	1,129	DRMO
		JP-5 w/synthetic oil	487	
		Decon kit, part B	183	
		Decon kit, part A	139	
MALS-16 Airframes (673)	Painting/tire shop/ welding (G,TAA)	Rags w/oil	688	DRMO
		Petroleum oil	316	
		Paint booth sludge	6,670	
		Aerosol lacquer paints	154	
		Miscellaneous paints	328	
		Paint stripper	328	
MALS-16 (673)	Maintain aviation logistic squadron (G, TAA)	Aircraft paint thinner	50	DRMO
		Methyl ethyl ketone	24	
		Absorbent w/fuel, oil	554	
		Rags w/fuel, oil	250	
		Freon	150	
		Batteries (magnesium/alkaline)	100	
		Batteries (mercury)	100	
MALS-16 Avionics (673)	Repair avionics equipment (G, TAA)	Sulfuric acid spent	538	DRMO
		Rags w/fuel, oil	343	
		Rainwater w/oil	3,830	
		Batteries (lead acid)	126	
		Synthetic oil	145	
		Paint thinner	66	
		Rags w/PD-680	56	
		Corrosion preventative compound	138	
		Miscellaneous paint	185	
		Primer	47	
		Sealing compound	39	
		Petroleum oil	269	
		Aerosol enamel paint	108	
		Alodine corrosive resistant	37	
		Absorbent w/hydraulic fluid	49	
		Aerosol cleaning compound	97	

Table 1-3
Hazardous Waste-Generating Activities
(Sheet 5 of 7)

Facility (Building)¹	Activity	Name of Waste Material	Generation Rate (lb./2 months)²	Disposition
MALS-16 Cryogenics (673)	Repair life emergency support equipment (G, TAA)	Petroleum oil	146	DRMO
MALS-16 GSE North (673)	Ground equipment provide power/test electrical system/ service hydraulics fuels/start engine/ maintain and tow tractors (G, TAA)	Oil w/antifreeze Synthetic oil Used oil/diesel filters Latex gloves w/synthetic oil Petroleum oil w/synthetic oil 25% Freon w/75% hydraulic fluid Aerosol cleaning compound Rags w/fuel, oil	199 474 218 52 230 436 35 252	DRMO
MALS-16 Ordnance (673)	Explosives/bomb s, build work support equipment/carry ammunition/ support armory (G, TAA)	Rags w/grease Corrosion preventative compound Aerosol lacquer paint Rags w/oil Petroleum oil Aerosol enamel paint Alodine corrosive resistant Absorbent w/hydraulic fluid Aerosol cleaning compound	108 44 118 373 269 108 138 49 97	DRMO
MALS-16 Power plants (673)	Fix and maintain F404 and T54 Engine (G, TAA)	Rags w/fuel, JP-5, Synthetic oil JP-5 w/synthetic oil Decon kit, part B Decon kit, part A	1,129 487 183 139	DRMO
MWR-Auto #1(651)	Auto repair shop (G, TAA)	Grease Fuel w/water Used oil/diesel filters Petroleum oil	142 108 698 522	DRMO
MWSS-373 Headquarters (800)	Repair and maintenance of tactical vehicles (G, TAA)	Aerosol spray paint Rags w/fuel, oil Aerosol enamel spray paint Absorbent w/fuel, oil Used oil/diesel filters Antifreeze	171 755 238 925 164 154	DRMO
MWSS-373 Refuelers (671)	Refuel by truck (G, TAA)	Absorbent w/fuel, oil Petroleum oil PD-680 Acidic cleaning compound	374 878 314 684	DRMO

Table 1-3
Hazardous Waste-Generating Activities
(Sheet 6 of 7)

Facility (Building)¹	Activity	Name of Waste Material	Generation Rate (lb./2 months)²	Disposition
MWSS-373 Utilities (31)	Fix and maintain generator/refer equipment/ laundry unit shower/RO water system (G, TAA)	Absorbent w/fuel, oil Rags w/solvents Petroleum oil	438 164 338	DRMO
MWSS-374 Headquarters (315)	Repair and maintenance of tactical vehicles (G, TAA)	Aerosol spray paint Rags w/fuel, oil Aerosol enamel spray paint Absorbent w/fuel, oil Used oil/diesel filters Antifreeze	171 755 238 925 164 154	DRMO
MWSS-374 Refuelers (315)	Refuel by truck (G, TAA)	Absorbent w/fuel, oil Petroleum oil PD-680 Acidic cleaning compound	374 878 314 684	DRMO
MWSS-374 Utilities (315)	Fix and maintain generator/refer equipment/ laundry unit shower/RO water system (G, TAA)	Absorbent w/fuel, oil Rags w/solvents Petroleum oil	438 164 338	DRMO
SOMS HQ (289)	Emergency arrestment (G, TAA)	Absorbent w/fuel, oil Petroleum oil	104 218	DRMO
SOMS Recovery (307) SOMS Salvation (2)	Emergency arrestment (G, TAA)	Absorbent w/oil debris Aerosol spray paint Petroleum oil Absorbent w/fuel, oil Diesel w/water Batteries (lead, acid)	78 193 1,298 136 574 150	DRMO

Table 1-3
Hazardous Waste-Generating Activities
(Sheet 7 of 7)

Facility (Building)¹	Activity	Name of Waste Material	Generation Rate (lb./2 months)²	Disposition
VMFAT-101 (371)	FA-18 aircraft (G, TAA)	Corrosion preventative compound	67	DRMO
		Miscellaneous paint	173	
		Enamel paint	101	
		Rags w/fuel, oil	1,063	
		Rags w/AC paint thinner	159	
		Absorbent w/fuel, oil	1,213	
		Cleaning compound (sodium hydroxide)	66	
		Cleaning compound (orthocresol)	687	
		Hydraulic fluid	1,966	
		Paint thinner	404	
		JP-5	1,192	
		Methyl ethyl ketone	96	
		Oil w/lead	100	
		Aliphatic isocyanate	168	
		Water w/oil	1,500	
		Sulfuric acid, spent	550	
		Rags w/synthetic oil	100	
		Paint booth filters	218	
VMGR-352 (297)	KC-130 aerial transport, refuel vow line (G, TAA)	25% Freon w/75% hydraulic fluid	442	DRMO
		Rags w/fuel, oil	403	
		Miscellaneous paint	360	
		Enamel paint	105	
		Batteries (lead, acid)	400	
		Adhesive	60	
		Paint stripper	72	
		Aerosol spray paint	70	
		Synthetic oil	868	
		Hydraulic fluid	444	
		Absorbent w/fuel, oil	1,260	

Source: SAIC 1994. Draft Hazardous Materials Management Plan.

Notes: ¹ The column in the BCP table entitled "Unit" is not included; according to EO staff, the unit column is the same as facility building

² pounds per two-month period (July/August 1992)

Abbreviations: G - generator

TAA - temporary accumulation area (less than 90-day accumulation area)

DRMO - Defense Reutilization and Marketing Office

THIS PAGE INTENTIONALLY LEFT BLANK

Table 1-4
On-Base Tenant Units
(Sheet 1 of 4)

Tenant	Building Number(s)
13th Dental	20,105, 439, 457
3rd Marine Air Wing	139, 829, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921
Adjutant	46, 65, 420, 692
Aero Club	766
Aviation Physiology Training Unit	684
Aviation Weapons Training Unit	826
Aviation Weapons Training Unit-3	405, 406, 407, 407, 409, 1721, 1809
CACI	456
CEO	757, 773, 774, 775, 776, 777
Chaplain	83, 581, 833
Comptroller	66, 304, 475
Crash Crew	850, 851
Combat Service Support Detachment-14	147, 273, 313, 333, 387, 388, 655, 759, 760
Defense Commissary Agency	317, 329
Defense Logistics Agency	197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 547, 548, 549, 550, 551
Defense Reutilization Marketing Office	319, 633, 784
Explosive Ordnance Disposal	780, 794, 795
Federal Aviation Administration	416
Fleet Aviation Specialized Operational Training Group	629
Food Service	364, 457
G-1 Personnel	58, 75, 83, 279, 581, 656, 873
G-3 Air Operations	349, 414, 588, 596, 597, 598, 638, 677
G-4 Logistics	29, 31, 32, 33, 34, 35, 38, 248, 251, 375, 742, 744
G-4 Transients	249, 250
G-6 Ground Electronic Maintenance Division	1, 53, 138, 321, 394, 399, 404, 573, 584, 730, 860, 861
G-6 Training	874
G-6/Federal Aviation Administration	372
Guard Safety	523
Headquarters and Headquarters Squadron	1
Headquarters and Headquarters-37	245, 305
Headquarters and Headquarters-38	8, 9, 11, 22, 23, 56
Marine Medium Helicopter Squadron-764	295
Housing	133, 614

Table 1-4
On-Base Tenant Units
(Sheet 2 of 4)

Tenant	Building Number(s)
Human Resources Office	304
Installation	58, 96, 146, 152, 155, 156, 174, 175, 293, 298, 299, 300, 301, 302, 306, 324, 326, 335, 357, 358, 368, 370, 374, 377, 380, 382, 383, 384, 385, 386, 445, 446, 448, 496, 529, 530, 566, 567, 568, 579, 582, 583, 610, 616, 619, 639, 640, 641, 642, 643, 659, 662, 674, 675, 676, 678, 685, 689, 733, 735, 753, 769, 770, 772, 778, 779, 789, 796, 818, 834, 836, 837, 838, 852, 855, 862, 1595, 1601, 1710
Joint Public Affairs Office	59
Marine Air Control Group-38	328
Marine Air Control Squadron-38	169
Marine Air Federal Credit Union	743
Marine Aircraft Group-11	136, 137, 292, 391, 415, 457, 701, 711, 712, 713, 734, 761, 763, 767, 816, 843, 854, 856, 886, 887, 891, 923
Marine Aircraft Group-46	296
Marine Aviation Logistics Squadron-11	105, 127, 129, 130, 131, 132, 142, 290, 291, 308, 341, 371, 392, 447, 456, 469, 602, 634, 636, 658, 664, 673, 716, 726, 745, 749, 750, 751, 756, 764, 786, 831, 840, 856, 1650, 1651, 1787, 1791
Marine Aviation Logistics Squadron-46	295
Marine Air Support Squadron-6	49
Marine Air Traffic Control Squadron-38 (DETD)	137
Marine Air Traffic Control Squadron-48	47, 49
Marine Corps Combat-3	748
Marine Wing Communications Squadron	5, 13, 14, 15, 16, 17, 21, 56, 600, 844
Marine Wing Headquarters Squadron	7, 12, 19, 20, 48, 52, 275, 787, 832, 1720
MWO-HOSP	355
Morale, Welfare, and Recreation	10, 390, 402, 410, 421, 422, 427, 430, 432, 457, 703, 704, 881, 882, 883, 884, 894
Morale, Welfare, and Recreation-Hospital	347, 372, 649, 718, 791, 793, 823
Morale, Welfare, and Recreation-Headquarters	75
Morale, Welfare, and Recreation-Recreation	75, 94, 264, 272, 280, 459, 460, 464, 578, 601, 607, 615, 625, 626, 679, 680, 681, 686, 687, 736, 782, 788, 790, 792, 817, 828, 830, 859, 885, 922, 924, 925, 1775, 1798
Morale, Welfare, and Recreation-Retail	77, 637, 649, 650, 651, 722, 783, 799, 1702
Morale, Welfare, and Recreation-Support	77, 285
Marine Wing Support Group-37	309, 758, 762, 771
Marine Wing Support Squadron	51

Table 1-4
On-Base Tenant Units
(Sheet 3 of 4)

Tenant	Building Number(s)
Marine Wing Support Squadron-371	765
Marine Wing Support Squadron-373	25, 26, 28, 307, 313, 671, 672, 800, 801, 802, 803, 804, 825, 875
Marine Wing Support Squadron-472	50
Naval Aviation Engineering Service Unit	745, 829
Naval Air Maintenance Training Group Detachment	324, 325, 631
Naval Hospital	256, 439, 876
Nuclear Biological Chemical	1655, 1656, 1662, 1719, 1789
NWSSP	292
Provost Marshal's Office	6, 27, 657, 702, 707, 708, 725, 729, 835, 856, 858
PMTC	292
Reserve Support Unit	60
Security	75, 98, 121, 311, 324, 376, 665, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872
Staff Judge Advocate	54, 257
Staff Non-Commissioned Officer Academy	367
Station Operations Maintenance Squadron	2, 3, 4, 99, 288, 289, 307, 372, 435, 586, 587, 594, 595, 624, 644, 645, 646, 647, 717, 721, 824, 877, 878, 879, 880, 1815
Station Operations Maintenance Squadron/ Federal Aviation Administration	372
Station Ordnance	536, 537, 538, 539, 540, 542, 543, 544, 545, 546, 611, 682, 781, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 841, 893, 1752, 1810
Station Training	242, 819
MCAS El Toro	1, 58, 124, 135, 366, 367, 376, 389, 440, 441, 442, 449, 450, 451, 452, 455, 660, 661, 666, 667, 668, 669, 731, 732, 739, 740, 741, 842, 889, 890, 895, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911
Station/Provost Marshal's Office	898
Supply	189, 241, 285, 314, 318, 319, 320, 321, 359, 360, 363, 369, 379, 396, 419, 534, 552, 555, 556, 558, 559, 560, 561, 599, 635, 670, 683, 699, 700, 747, 752, 755, 797, 827, 853, 1538, 1580, 1703
Trainee Management Element-31	324
Training	57, 243, 244, 251, 263, 271, 443, 471, 472, 519, 520, 693, 746, 839
Vacant	115, 122, 123, 135, 163, 164, 166, 167, 170, 171, 172, 296, 307, 322, 688, 697, 709, 710

Table 1-4
On-Base Tenant Units
(Sheet 4 of 4)

Tenant	Building Number(s)
Vacant (G-4)	240, 276, 277, 297, 310, 445
Vacant (DLA)	176, 177, 178, 179, 180, 181, 182, 183
Vacant (Inst)	222, 373
Vacant (MAG-11)	230, 231, 1804
Vacant (STA)	312, 315
Vacant (Supply)	191, 553, 554
Marine All Weather Attack Squadron 121	454, 462, 714, 728
Marine All Weather Attack Squadron 242	453, 458, 461, 715, 727
Marine All Weather Fighter Attack Squadron 225	124, 125, 126
Marine Fighter Attack Squadron 134	296
Marine Fighter Attack Squadron 225	698
Marine Fighter Attack Squadron 314	118, 119, 120, 605, 695, 892
Marine Fighter Attack Squadron 323	121, 134, 606, 696
Marine Fighter Attack Squadron 352	114
Marine Fighter Attack Training Squadron-101	371, 463, 487, 785, 845, 848, 849
Marine Fighter Attack Squadron-235	292
Marine Aerial Refueler/Transport Squadron-352	297
West Coast Commissary Complex/Defense Commissary Agency	694
Wing Nuclear Biological Chemical	798

Source: MCAS El Toro Building List 1993

Abbreviations: CEO - Chief Executive Officer
 PMTC - Pacific Missile Test Center

**Table 1-5
Property Acquisition Summary
(Sheet 1 of 1)**

Tract Number ¹	Previous Land Owner	ACREAGE			Type of Acquisition
		Fee Land	Easement Land	Acquisition Date	
A	Irvine Ranch	2318.833	Not Available	27 October 1942	Acquired from the Irvine Ranch Corporation under the authority of an Act of Congress, approved 27 March 1942
B	Irvine Ranch	21.525	Not Available	01 July 1945	Acquired from the Irvine Ranch Corporation under the authority of an Act of Congress, approved 24 February 1942
C	El Toro Development Company	160.734	Not Available	09 January 1952	Acquired by a Grant Deed from El Toro Development Company
D	The Irvine Company	1403.42	Not Available	13 August 1953	Acquired pursuant to a Declaration of Taking filed with the U.S. District Court for the Southern District of California
E	The Irvine Company	86.95	Not Available	April 1972	Acquired by exchange from The Irvine Company
F	The Irvine Company	729	Not Available	1976	Acquired by exchange from The Irvine Company
G	The Irvine Company	17.74	Not Available	December 1986	Purchased from The Irvine Company
Total Acreage:		4738.202			

Sources: MCAS El Toro Master Plan 1991
Brown and Caldwell 1986

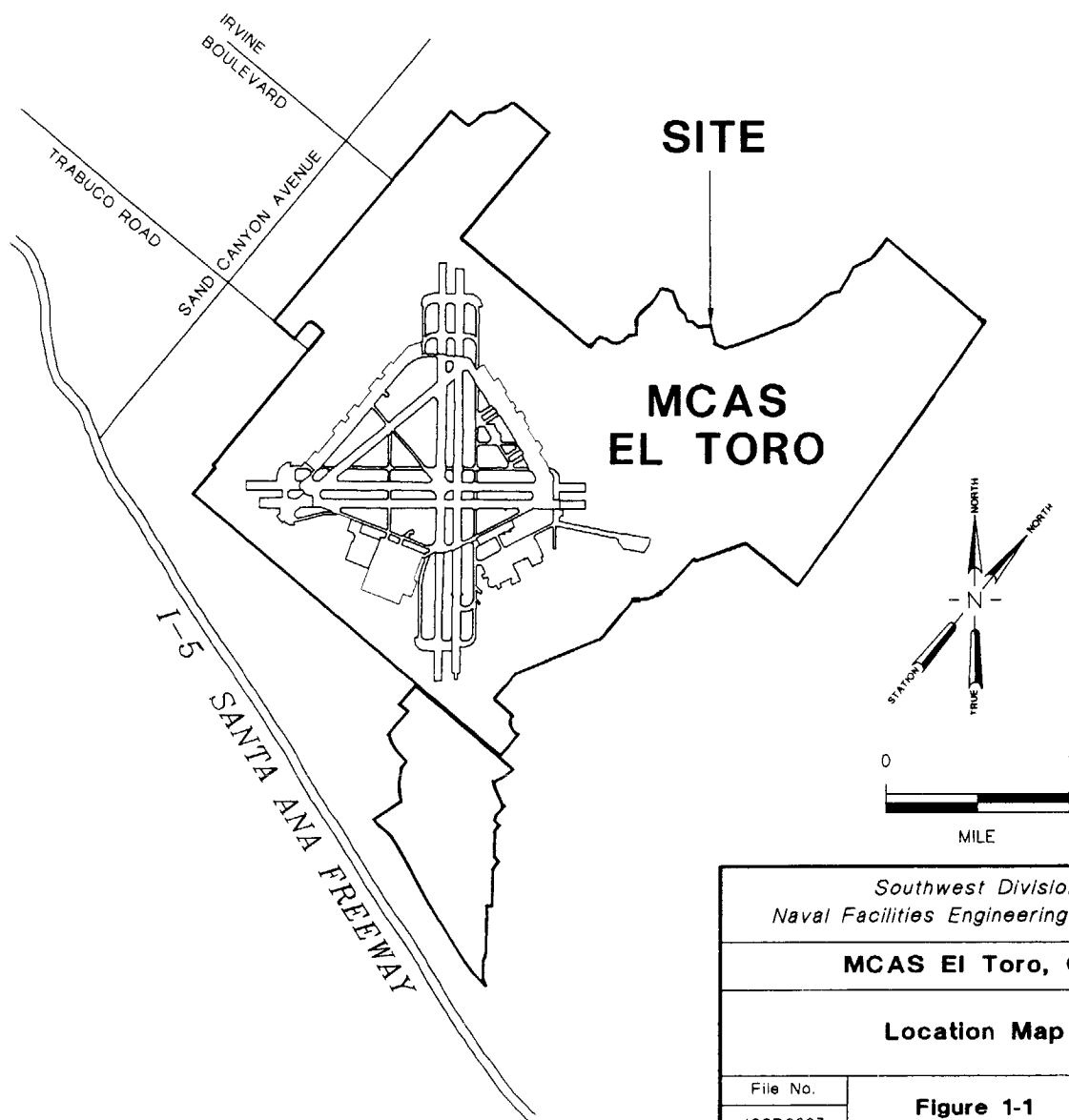
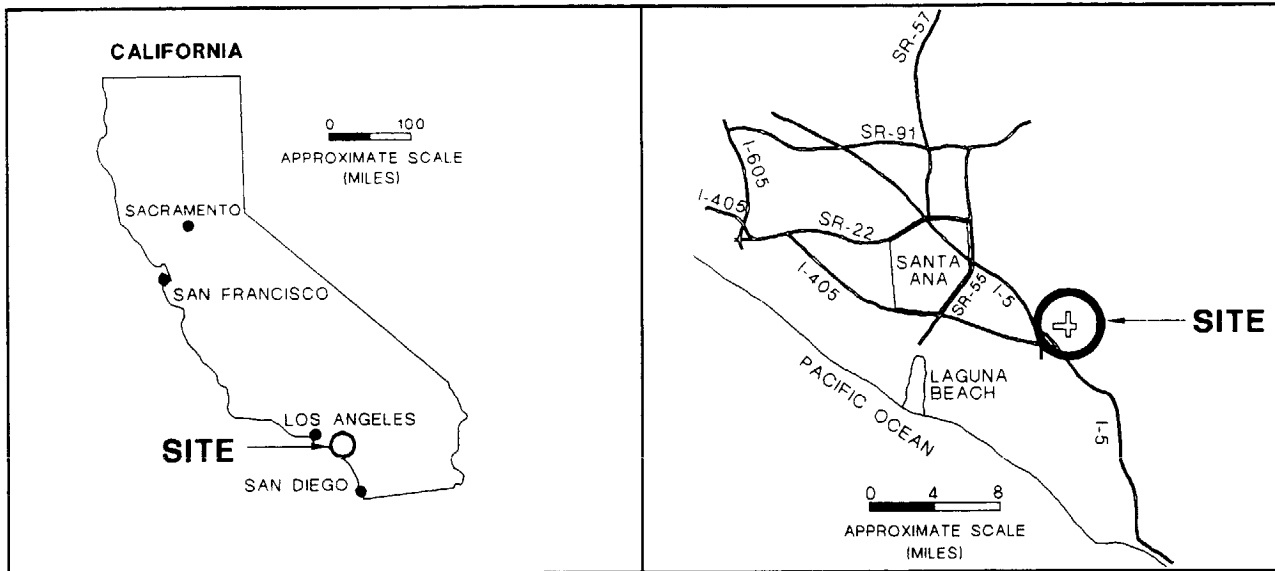
Note: ¹ tract numbers correspond to Figure 1-4

THIS PAGE INTENTIONALLY LEFT BLANK

**Table 1-6
Off-Base Properties
(Sheet 1 of 1)**

Description	Acreage	Date of Acquisition	Environmental Status	Location	Remarks
Big Bear Recreation Facility	6.5	1985	Unevaluated	Big Bear, CA	Navy plans to retain facility

THIS PAGE INTENTIONALLY LEFT BLANK



*Southwest Division
Naval Facilities Engineering Command*

MCAS El Toro, CA

Location Map

File No.

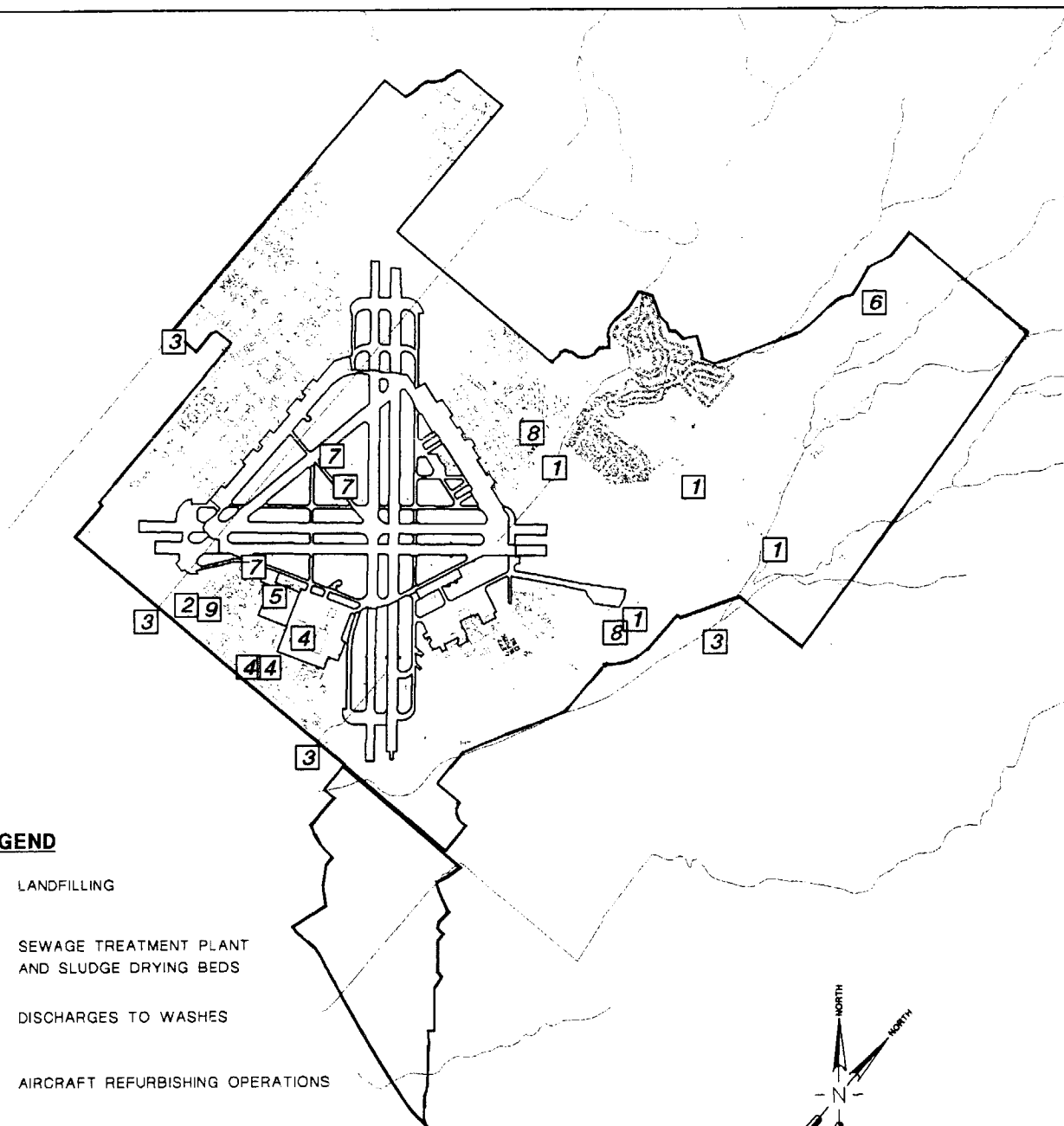
103R0237

Figure 1-1

Date

3/1/96

THIS PAGE INTENTIONALLY LEFT BLANK

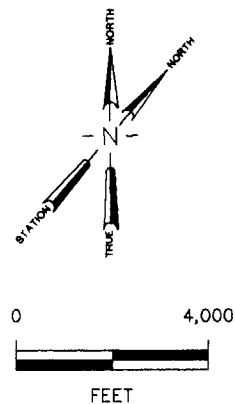


LEGEND

- 1** LANDFILLING
- 2** SEWAGE TREATMENT PLANT AND SLUDGE DRYING BEDS
- 3** DISCHARGES TO WASHES
- 4** AIRCRAFT REFURBISHING OPERATIONS
- 5** PETROLEUM DISPOSAL AREA
- 6** EXPLOSIVE ORDNANCE DISPOSAL
- 7** FIVE TRAINING AREA BURN PITS
- 8** WASTE BURNING
- 9** INDUSTRIAL WASTE TREATMENT PLANT

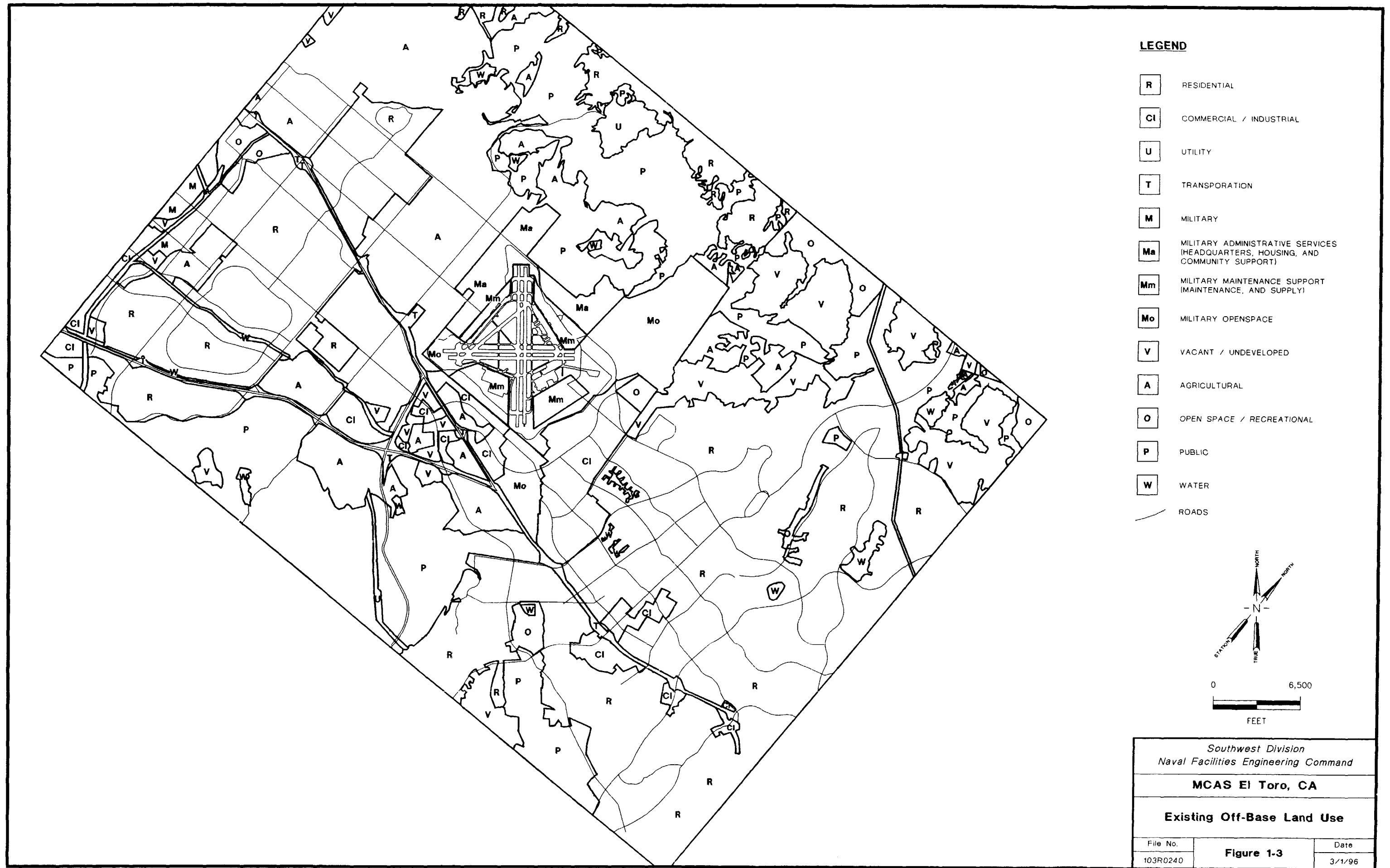
———— MCAS EL TORO BOUNDARY

----- STATION WASHES



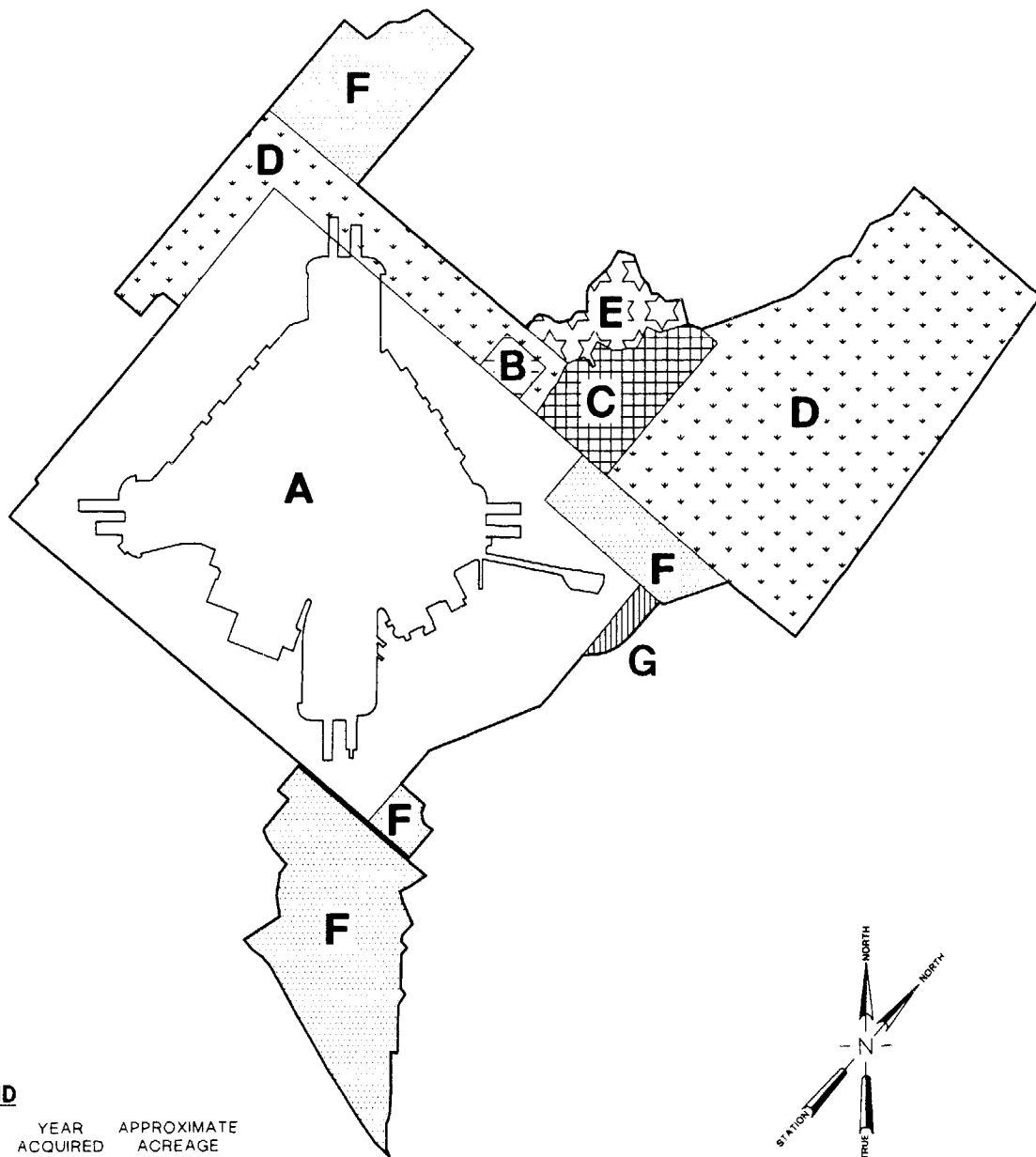
Southwest Division Naval Facilities Engineering Command		
MCAS El Toro, CA		
Location of Past Hazardous Substance Activities		
File No.	Figure 1-2	Date
103Q0248		3/1/96

THIS PAGE INTENTIONALLY LEFT BLANK



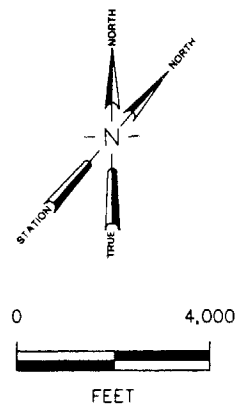
PAGE NUMBER 1-40

**THIS PAGE WAS
INTENTIONALLY LEFT BLANK**



LEGEND

	YEAR ACQUIRED	APPROXIMATE ACREAGE
A	1942	2,319
B	1945	22
C	1952	161
D	1953	1,403
E	1972	87
F	1976	729
G	1986	18



Southwest Division Naval Facilities Engineering Command		
MCAS El Toro, CA		
History of Land Acquisitions		
File No.	Figure 1-4	Date
103P0238		3/1/96

THIS PAGE INTENTIONALLY LEFT BLANK

THERE ARE NO OFF-BASE PARCELS ASSOCIATED
WITH MCAS EL TORO.

<i>Southwest Division</i> <i>Naval Facilities Engineering Command</i>		
MCAS El Toro, CA		
Off-Base Parcels		
File No.	Figure 1-5	Date
103L0249		3/1/96

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 2

Property Disposal And Reuse Plan

This chapter describes the status of, and strategy for, real property disposal efforts at MCAS El Toro and the relationship between these property disposal efforts and environmental cleanup efforts. While no community reuse plan exists, the Local Redevelopment Authority (LRA) has initiated state, local government, and homeless screening to identify potential future uses of Station property. Approximately 2,982 acres (63 percent) of Station property is considered uncontaminated and is eligible for disposal under Community Environmental Response Facilitation Act (CERFA) provisions. Efforts guided by CERCLA and other relevant federal and local regulations are underway to increase the amount of land suitable for transfer.

2.1 STATUS OF DISPOSAL PLANNING PROCESS

Orange County (County) along with the cities of Irvine and Lake Forest formed the El Toro Reuse Planning Authority (ETRPA) and began deliberations in March 1994. On 31 January 1995, however, the County withdrew from the ETRPA to pursue formation of a new reuse committee as mandated by Measure A, which was approved in the November 1994 elections. Measure A requires that the County General Plan be amended to have 2,000 acres at the Station designated for commercial airport use.

On 05 April 1995, the Office of Economic Adjustment (OEA) formally recognized the Orange County Board of Supervisors as the official LRA for MCAS El Toro. However, a coalition of six southern Orange County cities remain opposed to the County method to interpret and comply with the provisions of Measure A. These cities have formed a nine-member board of city council representatives for the purpose of developing their own redevelopment plan to submit to the DON, despite OEA advice that the County is intended to be the single point of contact to meet reuse challenges.

The official LRA, referred to as the El Toro Local Redevelopment Authority (ETLRA), has selected a consultant to complete the Community Reuse Plan (CRP), and to conduct the Environmental Impact Report.

The purpose of the CRP is to indicate the County preferences for the use of parcels available from MCAS El Toro. The reuse plan is also used as the preferred alternative in the federal Environmental Impact Statement (EIS) study for the base. Any planned roadways or widening of roads will also be presented in this document. On 02 September 1994, the CRP was partially funded by the Department of Defense (DoD) through the OEA and contracted by the County. This effort comprised Phase 1 of the CRP for completion under ETRPA guidance and was completed as scheduled. The remainder of the CRP under the new El Toro LRA is projected to be completed by 15 December 1996.

Property Disposal Process. Disposal of MCAS El Toro land for reuse will be conducted in accordance with the Base Closure and Realignment Act of 1990, the Pryor amendment to the National Defense Authorization Act, the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, and the Base Reuse Implementation Manual of July 1995. In accordance with the National

Environmental Policy Act (NEPA), the DON will issue a Disposal and Reuse Record of Decision (D&R ROD) on the basis of an EIS prepared for the Station.

On 26 October 1994, President Clinton signed into law the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, which has significantly changed the BRAC process. Under this law, BRAC actions are removed from the McKinney Act with the requirement that they be addressed in the planning process of the local redevelopment authority. The other major aspect of this law affects the screening process of available properties at MCAS El Toro. While the DoD and federal screening process will continue much as they have in the past, state, local, and homeless screening will now be the responsibility of the local redevelopment agency.

As part of the BRAC process, the DON has been conducting required DoD and federal screening of available properties at MCAS El Toro identified in the 1993 closure actions.

Currently, two public highway expansion projects are underway that will result in transfer of MCAS El Toro property. These projects are the Bake Parkway/Interstate 5 project and the Alton Parkway Extension project.

The County and the DON have entered into agreements permitting the transfer by quitclaim deed of the Bake Parkway/Interstate 5 right-of-way and the Alton Parkway right-of-way at fair market value. The DON issued a license for construction of the road for the Bake Parkway/Interstate 5 project, pending completion of a Finding of Suitability to Transfer and transfer deeds.

The following federal agencies have submitted requests for MCAS El Toro property:

- Air National Guard;
- Department of Interior;
- Department of Justice/Bureau of Prisons;
- Federal Aviation Administration;
- Immigration and Naturalization Service;
- Marine Corps Exchange; and
- Defense Exchange Agency.

None of the requested transfer actions for DoD or federal agencies have been approved by the Assistant Secretary of the Navy as of 31 December 1995. Parcel recipients and disposal methods cannot be finalized until the reuse plan is finalized and the D&R ROD is issued.

In accordance with the Base Closure Community Redevelopment and Homeless Assistance Act, the County requested that MCAS El Toro be included under the provisions set forth by this act. A draft land disposal plan will be prepared in accordance with the aforementioned laws and regulations. The planning effort will include defining the parcels designated for reuse. Final definition of the reuse parcels will be conducted by the LRA. Final decision rests with the DON as delegated by

DoD. Parcel recipients and disposal methods cannot be finalized until a D&R ROD is issued and a reuse plan is completed.

As mandated by CERFA, a basewide Environmental Baseline Survey (EBS) was completed in April 1995. One of the main objectives of the EBS was to evaluate the environmental condition of the property and to identify parcels that are potentially eligible for disposal under CERFA provisions. Information compiled in the final EBS is reflected on the condition of property map (Chapter 3) illustrating the environmental condition of MCAS El Toro property.

The final MCAS El Toro EBS report (Jacobs 1995) was submitted to the DON, U.S. EPA, and Cal-EPA on 01 April 1995. While the draft EBS report identified 20 parcels (approximately 2,500 acres) at the Station as being potentially uncontaminated under CERFA, the final EBS report identified all DoD Environmental Condition of Property (ECP) area type 1 areas (approximately 2,982 acres) as being uncontaminated under CERFA. ECP area type 1 land is property where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas). U.S. EPA concurred with the identification of ECP area type 1 properties as CERFA eligible. Cal-EPA agreed with U.S. EPA's decision.

In addition to identifying CERFA-eligible parcels, information from the EBS will be used to support findings of suitability to transfer (FOSTs) and findings of suitability to lease (FOSLs). The regulatory agencies will be involved in the development of FOST and FOSL documentation. It is anticipated that a FOST will be completed in 1996 for the transfer of the Bake Parkway/Interstate 5 right-of-way. A FOST for the Alton Parkway right-of-way is planned for 1997. The following documents need to be completed in order for FOSTs or FOSLs to be finalized:

- site-specific EBSs, as required,
- EIS,
- D&R ROD, and
- CRP.

In the absence of a reuse plan for the Station, reuse parcels have been identified according to the existing Station land use map presented in the MCAS El Toro Master Plan (MCAS El Toro 1991). For simplification of parcel boundaries and reduction of the number of parcels, similar land uses (e.g., housing and community support) were grouped in some instances. The parcel boundaries were also set up so that buildings are not split and the various locations of concern (LOCs) are typically contained within a single parcel.

As shown in Figure 2-1 (Potential Disposal and Reuse Parcels), the primary existing land use at the Station is the airfield operation (designated as parcels 5A through 5D). A description of the parcels is provided in Table 2-1 (Parcel Reuse Data Summary).

2.2 RELATIONSHIP TO ENVIRONMENTAL PROGRAMS

MCAS El Toro property may be transferred to other federal agencies or nonfederal parties. Transfers of federal property to nonfederal parties are governed by CERCLA 120(h), as amended by CERFA in 1992. However, property transfers between federal agencies are exempt from covenants requiring environmental response action, CERCLA 120(h)(3)(b).

Federal property transfer to nonfederal parties is dependent on the environmental condition of the subject property. The DON remains responsible for contaminated land and must conduct any necessary action to protect human health and the environment with respect to any hazardous substances or petroleum products that were present at the time of transfer. Remedial and removal actions must be selected and implemented before the property can be transferred to private parties, the state, or local government.

The property may be transferred by deed provided that the deed contains a covenant stating that remedial actions necessary to protect human health and the environment with respect to any hazardous substances remaining on the property have been taken before the date of transfer. CERFA amended CERCLA Section 120(h)(3) by clarifying that remedial action has been taken if the construction and installation of an approved remedial design have been completed, and the remedy has been demonstrated to be operating properly and successfully to the satisfaction of the U.S. EPA Administrator. It further states that carrying out extended pump-and-treat or long-term operation and maintenance will not preclude the property transfer if the remedy has been demonstrated to be operating properly and successfully.

Notwithstanding the preceding paragraphs, Section 2908 of the National Defense Authorization Act for Fiscal Year 1994 authorizes the Secretary of Defense to enter into agreements to transfer contaminated property to any person who agrees to perform all environmental restoration, waste management, and environmental compliance activities required for the property under federal and state laws, administrative decisions, agreements (including schedules and milestones), and concurrences. This section does not modify or alter the provisions of CERCLA. Therefore, the property will have to be in the condition required by CERCLA before the deed is executed on behalf of the United States. No such agreement to transfer may be entered into until the Secretary of Defense, in consultation with the U.S. EPA Administrator, has prescribed implementing regulations.

CERFA mandates expeditious transfer of uncontaminated land at federal installations undergoing closure or realignment. DoD policy on CERFA implementation defines uncontaminated land as "any real property on which no hazardous substances and no petroleum products or their derivatives, including aviation fuel and motor oil, were stored for one year or more, or known to have been released or disposed of."

The cleanup strategy for MCAS El Toro will incorporate the information from the environmental restoration program into the disposal and reuse process. A summary of the known locations of environmental concern identified within each reuse parcel is presented in Chapter 3.

2.3 PROPERTY DISPOSAL METHODS

A discussion of the various methods that will be considered for disposal of MCAS El Toro property is presented below.

2.3.1 Federal Transfer of Property

Several federal agencies have submitted requests for MCAS El Toro property. To date, none of the requested land transfers have been approved by the Assistant Secretary of the Navy. Upon approval, the DON will commence transfer proceedings of the subject property (or properties) to the sponsoring service via Form 1334, Request for Property Transfer process. This will include an appraisal of the subject property and a funds transfer from the receiving service to the DON. In lieu of this monetary compensation, required environmental cleanup can be considered or the monetary compensation may be waived. Infrastructure support for these facilities will be the responsibility of the agencies receiving the property. It will be incumbent on the receiving agency to negotiate with the LRA and utility service providers for services.

2.3.2 No-Cost Public-Benefit Conveyance

To date, no public-benefit conveyances have been granted.

2.3.3 Negotiated Sale

Properties not conveyed via the public-benefit conveyance method, or those not identified for economic development conveyance to the reuse committee, will be disposed in accordance with established regulations. These properties may be purchased by public agencies through negotiated purchase based on fair market value. Property acquired through negotiated purchase may be used or resold without deed restrictions, depending on the environmental condition of the property. Negotiated sales permit the local reuse authority to control the ultimate disposal of MCAS El Toro property without the uncertainty of the public-bid process.

2.3.4 Widening of Public Highways

Currently, two public highway expansion projects are being performed that will result in transfer of MCAS El Toro property. These projects are described below.

Bake Parkway/Interstate 5 Project. The Bake Parkway/Interstate 5 intersection project is currently underway and is scheduled for completion in 1996. A portion of the road is currently open to traffic. This construction project is located at the south end of MCAS El Toro at the edge of the southern flight corridor. The project is located within CERFA Parcel (CP)-16 as identified in the EBS. The County and the DON have entered into an agreement permitting the transfer by quitclaim deed of the

Bake Parkway/Interstate 5 right-of-way to Caltrans at fair market value. The DON issued a license for construction of the road, pending completion of a FOST and transfer of deeds, which is scheduled for 1996.

Alton Parkway Extension Project. Currently, Alton Parkway, which runs near the southeast side of the Station, ends at Irvine Boulevard. The County plans to extend Alton Parkway across Irvine Boulevard toward the northeast. This extension will occur on Station property near IRP Site 2. The roadway extension will also result in a severed parcel of Station property to the east. The County and the DON have entered into an agreement permitting transfer by quitclaim deed of the Alton Parkway right-of-way and severed parcel at fair market value. The severed parcel may be sold by the DON at a later date to another party or directly to the County. Transfer of the property for the planned project is scheduled for 1997.

2.3.5 Donated Property

There are currently no plans to donate any MCAS El Toro real property.

2.3.6 Interim Leases

Operational closure of MCAS El Toro is not scheduled until July 1999. As of 31 December 1995, numerous leases exist at the Station, as listed in Table 2-2 (Existing Legal Agreements/Interim Leases). Additional interim leases prior to operational closure of the Station will be considered on a case-by-case basis. No interim leases will be considered favorably if the result would impede current military operations. Certain leases prior to, or after, operational closure of MCAS El Toro may be appropriate and compatible with a CRP. Such leases may help defray costs for the DON.

2.3.7 Competitive Public Sales

If MCAS El Toro property is not transferred via the public conveyance or negotiated sales processes, the federal government may elect to dispose the property via a competitive public sale. These sales would be conducted in accordance with the established federal regulations and would utilize land-use designations provided by the reuse committee. This information would be included in the announcement of sale.

**Table 2-1
Parcel Reuse Data Summary
(Sheet 1 of 3)**

Parcel	Acres	Priority	Parcel Description/ Proposed Reuse	Known Sites	Projected Transfer Date	Transfer Mechanism	Recipient
1A	55.2	TBD	Supply/storage, admin., maintenance/TBD	IRP-13, 14; 49 other LOCs	TBD	TBD	TBD
1B	96.9	TBD	Community support, housing/TBD	IRP-20 93 other LOCs	TBD	TBD	TBD
1C	38.5	TBD	Admin., recreation, housing, training/TBD	35 LOCs	TBD	TBD	TBD
1D	110.07	TBD	Housing, community support, maintenance, recreation, admin./TBD	IRP-15; 57 other LOCs	TBD	TBD	TBD
1E	2.6	TBD	Northern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
1F	55.5	TBD	Recreation/TBD	5 LOCs	TBD	TBD	TBD
1G	106.8	TBD	Housing, community support, training/TBD	41 LOCs	TBD	TBD	TBD
2A	139.6	TBD	Airfield operations, supply/storage, maintenance, training/TBD	IRP-3, 4; 80 Other LOCs	TBD	TBD	TBD
2B	110.7	TBD	Community support, housing, school district, supply/storage/TBD	33 LOCs	TBD	TBD	TBD
2C	241.9	TBD	Housing, open land/TBD	18 LOCs	TBD	TBD	TBD
2D	7.4	TBD	Supply/storage (Tank Farm 555)/TBD	8 LOCs	TBD	TBD	TBD
2E	33.3	TBD	Northern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
2F	644.3	TBD	EOD Range, open land/TBD	IRP-1; 1 Other LOC	TBD	TBD	TBD

Table 2-1
Parcel Reuse Data Summary
(Sheet 2 of 3)

Parcel	Acres	Priority	Parcel Description/ Proposed Reuse	Known Sites	Projected Transfer Date	Transfer Mechanism	Recipient
3A	67.8	TBD	Maintenance, admin., supply/storage, training/TBD	46 LOCs	TBD	TBD	TBD
3B	60.8	TBD	Ordnance, supply/storage/TBD	IRP-5; 4 Other LOCs	TBD	TBD	TBD
3C	20.4	TBD	Agriculture/TBD	1 LOC	TBD	TBD	TBD
3D	8.8	TBD	Agriculture/TBD	None	TBD	TBD	TBD
3E	17.2	TBD	Agriculture/TBD	None	TBD	TBD	TBD
3F	178.6	TBD	Golf course/TBD	17 LOCs	TBD	TBD	TBD
3G	27.7	TBD	Southern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
3H	6.5	TBD	Southern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
3I	1.7	TBD	Southern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
4A	74.5	TBD	Maintenance, admin., training, community support/TBD	IRP-24 ¹ ; 84 Other LOCs	TBD	TBD	TBD
4B	89.3	TBD	Supply/storage, maintenance/TBD	IRP-12, 24 ¹ ; 33 Other LOCs	TBD	TBD	TBD
4C	0.8	TBD	Southern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
4D	6	TBD	Southern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
4E	7	TBD	Southern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD

**Table 2-1
Parcel Reuse Data Summary
(Sheet 3 of 3)**

Parcel	Acres	Priority	Parcel Description/ Proposed Reuse	Known Sites	Projected Transfer Date	Transfer Mechanism	Recipient
5A	1548.6	TBD	Runways and airfield operations/TBD	IRP-6, 7, 8, 9, 10, 11, 16, 19, 21, 22, 24 ¹ ; 123 other LOCs	TBD	TBD	TBD
5B	168.2	TBD	Northern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD
5C	431.7	TBD	Eastern flight corridor (agriculture and open land)/TBD	IRP-2, 17; 2 other LOCs	TBD	TBD	TBD
5D	369.4	TBD	Southern flight corridor (agriculture)/TBD	None	TBD	TBD	TBD

Notes: ¹ Site 24 (possible volatile organic compound source area) traverses three parcels (4A, 4B, and 5A)

Abbreviations: IRP – Installation Restoration Program
LOC – location of concern
TBD – to be determined

THIS PAGE INTENTIONALLY LEFT BLANK

**Table 2-2
Existing Legal Agreements/Interim Leases
(Sheet 1 of 4)**

Title of Interim Lease/ Legal Agreement	Building No./Areas	Date of Agreement	Parcel	Type of Outgrant
Alton Business Association	Landscaping & Maintenance Contract No. N6871192RP02Q18	1988 to 30 JUN 97	NA	License
Bordiers Nursery	Agricultural Lease/205.52 Acres Contract No. N6871103RP02021	Expires 31 OCT 97	NA	Agricultural Lease
Boy Scouts	Scout Activities/Bldg. 38 Contract No. N6871192RP02Q25	1987 to 31 JUL 95	NA	License
Boy Scouts	Scout Activities Contract No. N6247487RP00Q70	1987 to 31 JUL 95	NA	License
Civil Air Patrol	Admin. Office, Training & Support Facility Bldg. 328/Pending Availability of Bldg. 38 Contract No. N6871193RP03P84	1991 to 31 MAR 95	NA	License
El Toro Marine Corps Federal Credit Union	Credit Union/0.91 Acres Bldg. 743 Contract No. N6071193RP03P21	Expires 30 APR 97	NA	Lease
El Toro MCAS Civilian Credit Union	Credit Union/1500 SF Bldg. 304 Contract No. N6247490RP00Q09	1990 to 30 JUN 95	NA	License
FAA	Moving Target Indicator/Runway 7R-25L Contract No. N6871190RP00P87	1990 to Unknown	NA	Lease
FAA	Moving Target Indicator/Runways 16L&34R Contract No. N6871190RP00Q02	1990 to 19 MAY 95	NA	License
FAA	Control Tower Contract No. N6871191RP00P68	1991 to 29 FEB 96	NA	License
FAA & Department of Transportation	Air Traffic Control/0.33 acres at Bldg. 372 Contract No. N6071191RP00P11	1991 to 27 AUG 95	NA	Agreement
The Irvine Company	Easement/1.32 acres Contract No. N6247479RP00P91	1979 onward. No expiration date	NA	Agreement
The Irvine Company	Storm Drain/0.09 Acres Contract No. N6247479RP00P92	1979 onward. Perpetual Easement	NA	Easement

**Table 2-2
Existing Legal Agreements/Interim Leases
(Sheet 2 of 4)**

Title of Interim Lease/ Legal Agreement	Building No./Areas	Date of Agreement	Parcel	Type of Outgrant
The Irvine Company	Underground Electrical Line 0.52 Acres Contract No. N6247479RP00P93	1979 onward. Perpetual Easement	NA	Easement
The Irvine Company	Irrigation Water Pipeline 2.06 Acres Contract No. N6247479RP00P95	1979 onward. Perpetual Easement	NA	Easement
The Irvine Company	Construct Slopes/1.32 Acres Contract No. N6247479RP00P96	1979 onward. Perpetual Easement	NA	Easement
The Irvine Company	Easement/86.44 Acres	1983 to Indefinite	NA	Easement
The Irvine Company	Barranca Pkway Contract No. N6247483RP00P77	NA	NA	Easement
The Irvine Company	Flood Control Improvements Contract No. N6871192RP02Q17	Expires 14 SEP 95	NA	License
The Irvine Company	56 ft Access Road Project No. SW90 - 085	16 APR 92	NA	Easement
Irvine Industrial Research/Development	Landscape & Maintenance Contract No. N6871192RP00P13	1992 to 30 AUG 96	NA	License
Irvine Ranch Water District	Water Transmission Line Contract No. NP (R) - 32778	Perpetual Easement	NA	Easement
Irvine Ranch Water District	For Reservoir Contract No. N6871192RP02P82	17 APR 93	NA	License
Irvine Ranch Water District	Enlarge Flow Control Facility Contract No. N6247481RP00P20	25 FEB 93	NA	Easement
Irvine Ranch Water District	Water Pipeline/0.20 Acres Contract No. N6247479RP09025	1979 onward. Perpetual Easement	NA	Easement
Irvine Ranch Water District	Water Transmission Line Contract No. NF(R) 1483	NA	NA	Lease
Irvine Unified School District	School Site/10.73 Acres Contract No. N6871191RP00P96	1991 to 30 JUN 96	NA	Lease
Los Alisos & El Toro Water Districts	Water Transmission Main 3.78 Acres Contract No. NOY (R) - 59550	Permanent Easement	NA	Easement

Table 2-2
Existing Legal Agreements/Interim Leases
(Sheet 3 of 4)

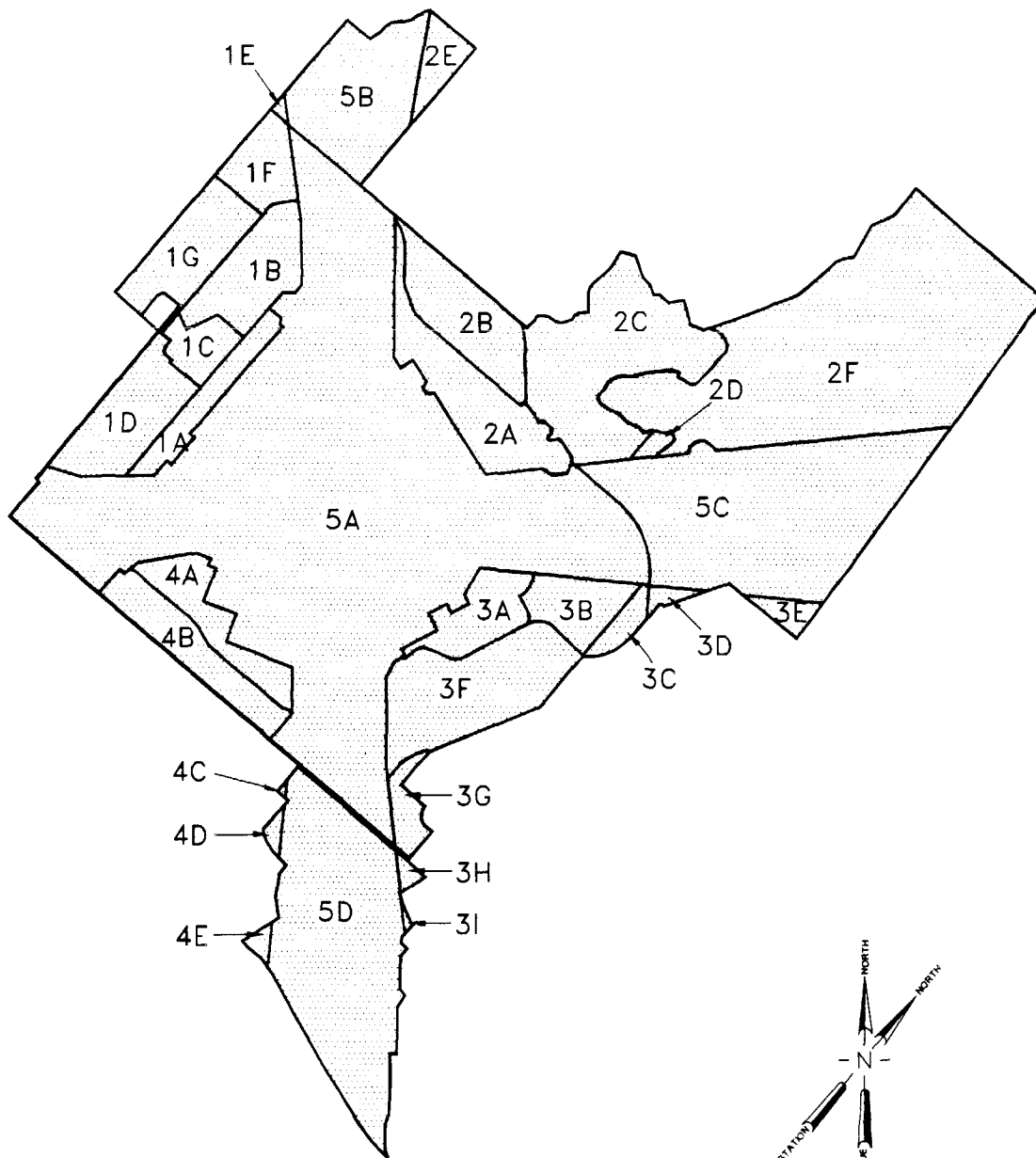
Title of Interim Lease/ Legal Agreement	Building No./Areas	Date of Agreement	Parcel	Type of Outgrant
Magarro Farms	Agricultural Lease/421 Acres Contract No. N6247489RP00Q14	1989 to Unknown	NA	Agricultural Lease
Not Known	Sale of severed parcels 1801 and 1802 (Alton Pkway) SW92 - 116	9 JUL 92	NA	Major Disposal
Orange County	Bake Parkway/Interstate 5 Expansion 25 Acres	9 JUL 92	NA	Major Disposal
Orange County	Right of Way	1987 to Indefinite	NA	Easement
Orange County	Easement - Irvine Blvd. Contract No. N6247488RP00T05	1988 to Indefinite	NA	Easement
Orange County	Interim Road/3.06 Acres Contract No. NOY (R) - 56107	Temporary	NA	Easement
Orange County	Water Pipeline/0.34 Acres Contract No. NOY (R) - 69386	Permanent Easement	NA	Easement
Orange County	Road - Irvine Blvd. Contract No. N6871192RP00P19	NA	NA	Easement
Orange County	Sale to Orange Co. for Alton Parkway (Congressional) SW92 - 041	9 JUL 92	NA	Major Disposal
Orange County Environmental Management Group	Traffic Signal at G-2/ Vehicle Detector Loop Contract No. N6871193RP03Q08	31 JUL 93 to 31 JUL 96	NA	License
Orange County Water District	Construction and O & M of Wells and Pipelines related to Treatment of Groundwater (Desalter Project)	1992 to Indefinite	NA	Easement
Orange County Flood Control	Flood Control Channel/2.87 Acres Contract No. N6247479RP00P94	1979 onward. Perpetual Easement	NA	Easement
Orange County Water District	Water Pipeline/8.89 Acres Contract No. N6247481RP00P20	1981 onward. Perpetual Easement	NA	Easement

Table 2-2
Existing Legal Agreements/Interim Leases
(Sheet 4 of 4)

Title of Interim Lease/ Legal Agreement	Building No./Areas	Date of Agreement	Parcel	Type of Outgrant
Pacific Tel.	Underground Telephone Line 0.19 Acres NOY (R) - 64721	Expires 13 JUN 2013	NA	Easement
SD Pipeline Co.	Petrol Transmission Pipeline Contract No. NOY (R) - 67877	Expires 29 MAR 2013	NA	Easement
Sea Tree Nurseries	Access & Storage Contract No. N6247489RP00Q15	1989 to Unknown	NA	License
SCE	Water Pipeline/0.01 Acres Contract No. N6247482RP00P09	1982 to 15 OCT 2025	NA	Easement
SCE	Electrical Dist. Contract No. N6247482RP00Q60	1982 to 11 JUN 2032	NA	Easement
SCE	Electrical District Lines 0.032 Acres Contract No. N6871191RP00P67	1991 to 14 MAY 96	NA	License
SCE	Fuse/Switch Slab Box Contract No. N68711912RP00P85	1991 to 1 JUN 96	NA	License
SCE	Relocate Utility Contract No. NOY (R) - 65723	Indefinite Agreement	NA	Agreement
Southern California Gas Company	Gas Pipeline/0.11 Acres Contract No. NOY (R) - 62897	Expires 27 JUN 2012	NA	Easement
Young Marine Organization	Space for Weekend Use Contract No. N6871192RP02Q23	30 JUN 92 to 30 JUN 95	NA	License
Young Marine Organization	Space for Weekend Use Contract No. N6247487RP00Q65	Expires 30 JUN 95	NA	License

Sources: MCAS El Toro Outgrant & Ingrant Listing as of 30 September 1991
MCAS El Toro Installations Department Database Records, 06 January 1994

Abbreviations: FAA – Federal Aviation Administration
NA – not available
SCE – Southern California Edison



LEGEND

4E

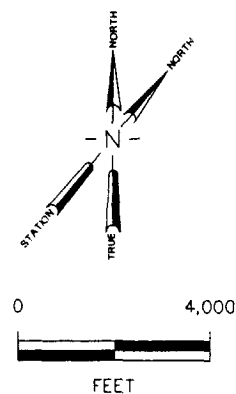
PARCEL IDENTIFIER: NUMBER REPRESENTS THE ZONE NUMBER WITHIN WHICH THE PARCEL IS LOCATED



MCAS EL TORO BOUNDARY



PARCEL BOUNDARY



Southwest Division
Naval Facilities Engineering Command

MCAS El Toro, CA

**Potential Disposal and
Reuse Parcels**

File No.

103P0239

Figure 2-1

Date

3/1/96

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 3

Installationwide Environmental Program Status

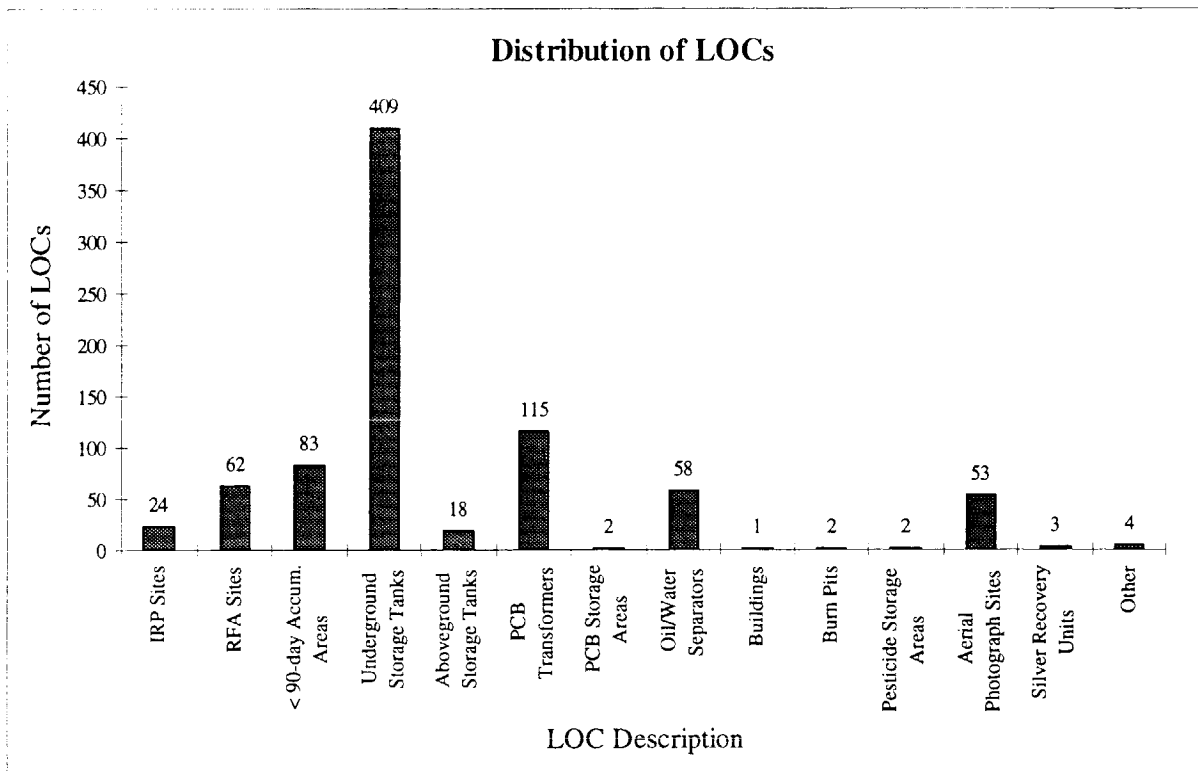
This chapter provides a summary of the current status of environmental restoration activities, installationwide source discovery and assessment activities, and ongoing compliance activities at MCAS El Toro. More than 800 LOCs have been identified at the Station. These LOCs fall into the following categories:

- IRP sites;
- Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) sites;
- less-than-90-day accumulation areas;
- underground storage tanks (USTs);
- aboveground storage tanks (ASTs);
- polychlorinated biphenyl (PCB) transformers;
- PCB storage areas;
- OWSs;
- buildings;
- burn pits;
- pesticide storage areas;
- sites identified by aerial photographs;
- silver recovery units; and
- other (including two possible landfills, the Desert Storm waste storage area, and JP-5 fuel supply lines).

Exhibit 3-1 shows the distribution of LOCs at the Station. The number of RFA sites in Exhibit 3-1 does not include those LOCs that have been designated as both a particular type of LOC mentioned above and as a solid waste management unit (SWMU)/area of concern (AOC) (i.e., a UST or OWS that has been designated as a SWMU/AOC).

Of the sites requiring further investigation, 24 IRP sites are currently in the Phase II RI process: Sites 1 through 22, 24, and 25. These sites have been grouped into three operable units (OUs).

- OU-1 addresses contaminated groundwater on and off-Station (Site 18).
- OU-2 consists of three subunits (OU-2A, OU-2B, and OU-2C) and addresses the potential source areas of groundwater contamination (OU-2A: Sites 24 and 25; OU-2B: Sites 2 and 17; and OU-2C: Sites 3 and 5).
- OU-3 consists of the remaining 17 sites.

Exhibit 3-1

Source: Table 3-1a

Current status of the OUs is as follows.

- A draft Interim Action Feasibility Study (IAFS) was completed for OU-1 and a draft Record of Decision (ROD) is scheduled for completion by 30 May 1996.
- OU-2A, OU-2B, and OU-2C are in the Phase II RI process. The draft Phase II RI report for OU-2A was completed on 20 February 1996. Draft Phase II RI Reports for OU-2B and OU-2C are scheduled for completion by 19 March and 19 April 1996, respectively. Draft RODs for OU-2A, OU-2B, and OU-2C are scheduled for completion by 22 January, 19 February, and 17 March 1997, respectively.
- Draft final Engineering Evaluation/Cost Analyses (EE/CAs) were submitted for public review for all or portions of seven OU-3 sites in October 1995. The remaining OU-3 sites are being addressed in additional EE/CAs, through withdrawal from the IRP via the CERCLA petroleum exclusion, and in Phase II RI reports.

In addition, investigations are currently ongoing for sites associated with compliance programs, including storage tanks, hazardous materials and waste management, solid waste management, PCBs, asbestos, radon, RCRA facilities, National Pollution Discharge Elimination System (NPDES) permits, Regional Clean Air Initiatives Market (RECLAIM)

permits, OWSs, silver recovery units, and lead-based paints (LBPs). These compliance programs are in various stages of operation and closure.

Furthermore, this chapter addresses the status of natural and cultural resources including threatened and endangered species, wetlands, surface waters, floodplains, archaeological resources, historic structures, and paleontological resources.

An evaluation of current environmental status at MCAS El Toro is also discussed. Real property was assigned one of seven DoD ECP category types, which identify the environmental condition of the property. The BCP guidebook defines the seven area types as follows:

- Area Type 1 – areas where no storage, release, or disposal has occurred;
- Area Type 2 – areas where only storage has occurred;
- Area Type 3 – areas where storage, release, disposal, and/or migration has occurred, but require no remedial action;
- Area Type 4 – areas where storage, release, disposal, and/or migration has occurred, and all remedial actions have been taken;
- Area Type 5 – areas where storage, release, disposal, and/or migration has occurred, and action is underway but not final;
- Area Type 6 – areas where storage, release, disposal, and/or migration has occurred, but required response actions have not been taken; and
- Area Type 7 – unevaluated areas or areas requiring additional evaluation.

The area type designations will eventually aid in determining the suitability of transfer of Station property.

Regulatory agencies, U.S. EPA, Cal-EPA, and the Marines have concurred that area type 1 parcels, which encompass approximately 2,982 acres, will be identified as CERFA uncontaminated and, therefore, be suitable for transfer. Area types 2 through 4 may also be suitable for transfer; however, they will not be recognized as CERFA uncontaminated parcels. Area types 5 through 7 will require additional investigation and/or remediation prior to transfer.

This chapter also addresses community relations activities at MCAS El Toro. Key components of the DON community relations activities associated with IRP and RCRA activities include Restoration Advisory Board (RAB) meetings, fact sheets, site tours, workshops, and press releases as required by regulations and as needed by the impacted community. The community relations program is designed to be flexible in order to address changing site conditions and community concerns. The DON has taken a proactive approach to community relations activities and intends to be open and responsive to the community during the Station restoration activities.

3.1 ENVIRONMENTAL PROGRAM STATUS

The following subsections provide a description and status of the IRP activities at MCAS El Toro.

3.1.1 Restoration Sites

In June 1988, U.S. EPA recommended listing MCAS El Toro on the National Priorities List (NPL) for the Superfund Program under CERCLA. The listing was predicated on the presence of VOC contamination in the groundwater at the Station boundary and the detection of VOCs in the agricultural wells to the west. MCAS El Toro was placed on the NPL in February 1990.

In October 1990, U.S. EPA, DTSC, the California Regional Water Quality Control Board (RWQCB) Santa Ana, and the DON signed an FFA to conduct an RI/Feasibility Study (FS) for MCAS El Toro following the National Contingency Plan (NCP) and U.S. EPA guidance. Under the FFA, the DON is the lead agency; U.S. EPA and Cal-EPA, including both the DTSC and the RWQCB Santa Ana, perform oversight.

The IRP being conducted at MCAS El Toro is currently in the Phase II investigation. Twenty-two sites were evaluated during the Phase I investigation, which was completed in May 1993. Site 23 (Wastewater Treatment Plant Sewer Lines) was evaluated in the RFA performed at the Station. In the RFA the sewer lines were recommended for no further action. The sewer lines are located in a newly identified site, Site 24 (Potential VOC Source Area), which encompasses most of the southwest quadrant of the Station. This area was evaluated during a soil gas survey in mid-1994 and will be further evaluated in the Phase II RI.

The final Work Plan for the Phase II RI was submitted in July 1995 (BNI 1995a). Two new sites, Sites 24 (Possible VOC Source Area) and 25 (Major Drainages), were established for investigation in Phase II. Because Site 23 is excluded from the IRP, the total number of IRP sites is 24.

Table 3-1a (Site Summary) presents a summary and description of the 24 IRP sites. The site locations are depicted in Figure 3-1 (Sites, Zones, and OUs Currently Under Investigation). The locations and extent of the IRP sites shown in this figure are based on site boundaries identified in the draft Phase II RI Work Plan (Jacobs 1993b). Figure 3-1 also shows the location and extent of groundwater contamination plumes that are or may be associated with the IRP sites. These contaminant plumes include:

- main chlorinated VOC plume in the southwest quadrant (Site 18);
- chlorinated VOC plume at Site 2;
- petroleum hydrocarbon plume near Sites 13 and 15; and
- petroleum hydrocarbon plume near Site 3.

The plumes shown in Figure 3-1 are contoured to the respective analytical detection limits. The plumes represent composites of contaminant contours. That is, overlapping plumes have been mapped as a single plume. The plume delineations are based on the IRP second round of groundwater quality monitoring (June 1993 through December 1993).

The IRP sites have been grouped into three main OUs. The OU definitions are described below.

- OU-1 addresses on- and off-Station groundwater that is contaminated with constituents that have migrated from sources at MCAS El Toro into the regional groundwater system. OU-1 includes Site 18.
- OU-2 consists of the potential source areas of groundwater contamination. OU-2 has been subdivided by the BCT as follows for funding and prioritization reasons:
 - OU-2A addresses the sites that are believed to be contributing to the VOC plume emanating from the southwest portion of the Station. OU-2A includes Site 24 (Potential VOC Source Area) and Site 25 (Major Drainages).
 - OU-2B addresses two of the Station landfills, Site 2 (Magazine Road Landfill) and Site 17 (Communication Station Landfill), that require full investigation and groundwater monitoring based on Phase I RI data. These sites will likely have presumptive remedies (e.g., capping) applied, provided that ecological receptors are not significantly affected.
 - OU-2C includes two additional Station landfills, Site 3 (Original Landfill) and Site 5 (Perimeter Road Landfill), that will undergo further groundwater monitoring to confirm that groundwater is not being impacted.
- OU-3 sites include those IRP sites not addressed in OU-1 and OU-2. These sites were primarily established under the IRP before MCAS El Toro was included on the NPL, and do not necessarily relate to contamination in groundwater. There are currently 17 sites classified in OU-3:
 - Site 1 (Explosive Ordnance Disposal Range),
 - Site 4 (Ferrocene Spill Area)
 - Site 6 (Drop Tank Drainage Area No. 1),
 - Site 7 (Drop Tank Drainage Area No. 2),
 - Site 8 (Defense Reutilization and Marketing Office [DRMO] Storage Area),
 - Site 9 (Crash Crew Pit No. 1),
 - Site 10 (Petroleum Disposal Area),
 - Site 11 (Transformer Storage Area),
 - Site 12 (Sludge-Drying Beds),
 - Site 13 (Oil Change Area),
 - Site 14 (Battery Acid Disposal Area),
 - Site 15 (Suspended Fuel Storage Tanks),
 - Site 16 (Crash Crew Pit No. 2),
 - Site 19 (Aircraft Expeditionary Refueling [ACER] Site),
 - Site 20 (Hobby Shop),

- Site 21 (Materials Management Group, Building 320), and
- Site 22 (TAFDS).

All or portions of Sites 4, 7, 8, 11, 12, 13, 14, 19, and 20 are scheduled for early action.

As new data become available, the OU definitions may be reevaluated and refined. The OU definitions can be modified at any time by agreement among the parties to the FFA.

Schedules for investigation and remediation of IRP sites at MCAS El Toro are specified in the FFA. A summary of the current schedules for the OUs is presented below (detailed schedules for the OUs are provided in Chapter 5).

- The FS for OU-1 is currently being prepared by the CLEAN I contractor. The Station is evaluating plans to enter into an agreement with the OCWD on the dual-purpose Irvine Desalter Project (IDP), which is intended to capture and treat contaminated groundwater and provide a local source of potable water. Remediation is planned to consist of extraction wells and a treatment system (installed as part of the IDP) to pump groundwater and remove solvent contamination believed to be emanating primarily from the southwest quadrant of the Station. Extraction wells have been proposed or installed at the southwest perimeter of the Station and in the southwest quadrant of the Station. The FFA specifies that the draft ROD for OU-1 be completed by 30 May 1996. The documents leading up to completion of the ROD for OU-1 include the following:
 - Draft Final IAFS, 12 February 1996
 - Revised Proposed Plan, 12 February 1996
- For OU-2A, OU-2B, and OU-2C the final Phase II RI Work Plan was submitted in July 1995. Fieldwork began in mid-1995. The draft Phase II RI report for OU-2A was completed on 20 February 1996. Draft Phase II RI Reports for OU-2B and OU-2C are scheduled for completion by 19 March and 19 April 1996, respectively. Draft RODs for OU-2A, OU-2B, and OU-2C are scheduled to be completed by 22 January, 19 February, and 17 March 1997, respectively.
- For OU-3, all or portion of Sites 1, 6, 7 (Units 2, 4, and 5), 8 (Units 2, 3, and 5), 9, 10, 12 (Units 1 and 2), 14 (Unit 2), 15, 16, 19 (Units 1 and 3), 20 (Units 1 and 4), 21, and 22 will be further investigated in the Phase II RI. Draft RODs are scheduled for completion by 21 October 1997.
- All or portions of OU-3 Sites 4, 7 (Units 1 and 3), 8 (Units 1 and 4), 11, 12 (Unit 3), 13, 14 (Unit 1), 19 (Unit 2), and 20 (Units 2 and 3) will not be included in the Phase II RI. Final EE/CAs for removal actions were submitted for public review in October 1995 for all or portions of Sites 4, 7, 11, 13, 14, 19, and 20. Action memoranda for the sites are scheduled to be issued in the first half of 1996, with final EE/CAs scheduled to be completed by mid-1996. An additional three early actions are scheduled for four units

of Sites 7, 8, and 12. Draft EE/CAs for these sites are scheduled for completion by March 1997.

To date, several early action processes have been initiated for the IRP sites (Table 3-3 [Early Action Status]). A brief description of the early actions is provided below.

- A soil gas investigation (field activities) at Sites 24 (Potential VOC Source Area) and 25 (Major Drainages) was completed in June 1994. The primary objective of the investigation was to locate potential shallow subsurface source(s) of VOC groundwater contamination. Potential VOC source areas investigated included IRP sites, RFA sites, and other significant features identified through records searches and interviews. A total of 18 potential halogenated hydrocarbon source areas and 5 potential aromatic hydrocarbon/total petroleum hydrocarbons (TPH) source areas were identified during the investigation. Fourteen of the 18 halogenated hydrocarbon source areas and 4 of the 5 aromatic hydrocarbon/TPH source areas were recommended for further action to evaluate the extent of contamination. These source areas at Sites 24 and 25 are being investigated in the Phase II RI.
- Draft final EE/CAs for all or portions of Sites 4, 7, 11, 13, 14, 19, and 20 were issued for public comments in October 1995.
- An additional three early actions for four units of Sites 7, 8, and 12 are scheduled for completion by March 1997.

Table 3-3 will be revised in updates of this BCP as early actions for IRP sites are implemented or completed.

3.1.2 Installationwide Source Discovery and Assessment Status

An EBS for MCAS El Toro was completed on 01 April 1995. One of the main objectives of the EBS was to evaluate the environmental condition of property at the Station to facilitate property disposal. Information from this study related to source discovery and assessment are detailed below.

3.1.2.1 Aerial Photograph Features/Anomalies

In 1993, a survey of historical aerial photographs of MCAS El Toro was performed by Science Applications International Corporation (SAIC) (SAIC 1993). The survey included photographs dating back to 1946. The photographs were reviewed for features/anomalies of potential environmental concern. Over 500 features/anomalies were identified by SAIC. The features/anomalies related to IRP sites were evaluated and incorporated, as appropriate, in the Phase II RI Work Plan. As part of the EBS, the remaining aerial photograph features/ anomalies were evaluated. The final EBS Report identified a total of 53 features/anomalies as features of potential environmental concern for further evaluation. Table 3-1b (Aerial Photograph Features/Anomalies) describes the features/anomalies recommended for further evaluation. These features/anomalies are shown in Figure 3-1.

3.1.2.2 Features Of Potential Environmental Concern Identified In Personnel Interviews

Interviews with current and former MCAS El Toro personnel were conducted on 26 May 1994. The interviewers included Station personnel, staff from SWDIV, the CLEAN I contractor, Cal-EPA representatives, and the U.S. EPA consultant. The purpose of these interviews was to obtain additional information regarding past hazardous substance management practices, activities, and releases at the Station. As a result of the interviews, the following two additional features of potential environmental concern were identified.

- A former landfill area was identified near Station family housing. During grading activities for housing construction in the early 1980s, the area located between Building 722, Connor Avenue, and Chosen Drive was filled with general construction refuse to stop water from collecting. Hazardous wastes are not known to have been disposed in this fill area. Additional evaluation of this area is needed.
- An additional landfill area was identified at the Perimeter Road Landfill. According to the interview panel, landfilling occurred in an area south of the current boundaries identified for the Perimeter Road Landfill (IRP Site 5). Hazardous wastes are not known to have been disposed in this extension of the landfill. Additional evaluation of this area is in progress in the Phase II RI.

These locations of potential environmental concern are shown in Figure 3-1.

During preparation of the draft EBS Report, a former Station employee reported that mercury leaks occurred at the two elevated water towers formerly located in the northwest portion of the Station. The former locations of these towers are shown in Figure 3-1. The towers had mercury water-level gauges near the ground surface. According to the former Station employee, these gauges leaked small quantities of mercury onto the unpaved ground surface at the base of the towers. These towers were constructed in 1943 (Building 222, east tower) and 1953 (Building 373, west tower); they were demolished in 1992. These locations should be evaluated further for evidence of mercury releases.

3.2 COMPLIANCE PROGRAM STATUS

The following sections provide a summary of the status of compliance programs at MCAS El Toro. The status of mission/operational-related compliance program activities is summarized in Table 3-4 (Mission/Operational-Related Compliance Projects). Closure-related compliance projects and early actions related to compliance are summarized in Tables 3-5 (Closure-Related Compliance Projects) and 3-6 (Compliance Early Action Status), respectively.

3.2.1 Storage Tanks

Storage tanks, including USTs and ASTs, are addressed in the following sections. Also included is a discussion of the fuel distribution systems (fuel pipelines) at the Station.

3.2.1.1 Underground Storage Tanks

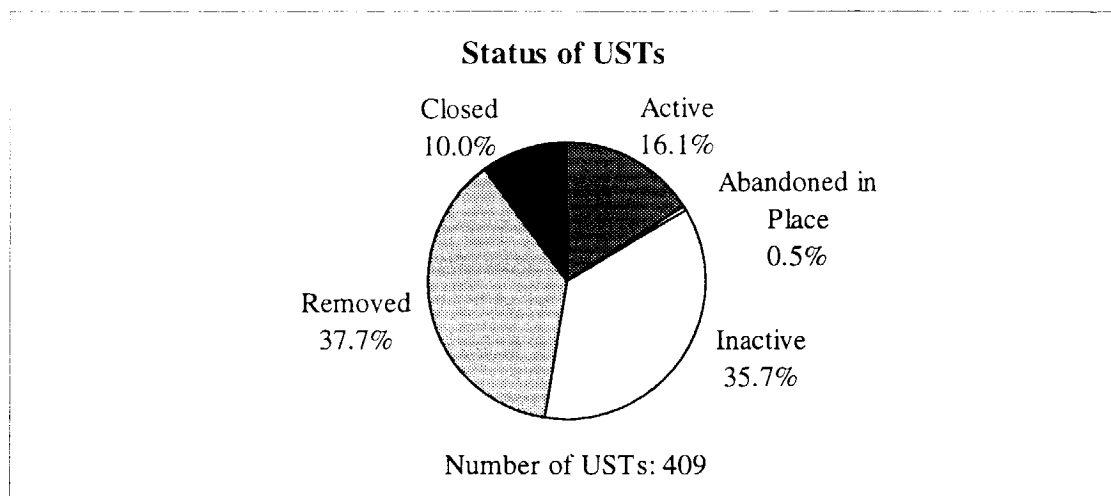
A total of 409 USTs have been identified at MCAS El Toro. This total includes 66 active, 146 inactive, 154 removed, 41 closed, and 2 abandoned tanks. Forty-one USTs were removed in 1995, and by early 1996 41 USTs were closed.

A comprehensive inventory of MCAS El Toro USTs is provided in Table 3-7 (Underground Storage Tank Inventory). This table includes available information on tank characteristics, compliance actions, known releases, and sampling results, if applicable. Exhibit 3-2 shows the status of USTs at MCAS El Toro.

The UST locations are plotted on a series of figures. Figure 3-2a (Key to UST Location Maps) delineates the sections of the Station encompassed by four area-specific maps. Figure 3-2b shows the northwest quadrant of the Station; Figure 3-2c shows the northeast quadrant of the Station; Figure 3-2d shows the southeast quadrant of the Station, and Figure 3-2e shows the southwest quadrant of the Station. These area-specific maps include all known UST locations at the Station with the exception of those noted in Table 3-7. The plotted UST locations are based on available information, including Station maps, UST surveys, UST removal drawings, RFA site visits, and interviews with Station personnel. Information on the locations for some of the USTs was unavailable. In these cases, the UST location maps show the UST in the center of the nearest building. Figures 3-2b through 3-2e indicate the status of each tank plotted as either active, inactive, removed, closed, or abandoned in place. Each figure also lists the USTs that appear on that figure to facilitate locating USTs.

Based on available soil sampling information, the environmental condition of the UST locations can be broken into three categories:

- Above California Leaking Underground Fuel Tank (LUFT) levels – These include UST locations with soil sample results greater than LUFT levels. To date, samples from 61 UST locations have shown results above LUFT levels at the Station.
- Below LUFT levels – UST locations where the tank has been removed and soil sample analytical results are below detection limits. To date, 90 UST locations have been identified with sample data below LUFT limits.
- Unevaluated or additional investigation required – A total of 258 UST locations at the Station are unevaluated or require further evaluation. This category includes USTs that have not been evaluated, have analytical results pending, or have analytical results above detection limits but below LUFT values and are under review by the agencies.

Exhibit 3-2

Source: Table 3-7

Compliance issues for USTs are managed by the MCAS El Toro Environmental Office (EO). Maintenance activities for USTs are the responsibility of the Station Assistant Chief of Staff (AC/S) Installations Department. Operational responsibilities are split among Station organizations and tenants. Information on USTs was obtained from the Station UST Inventory Database. These data were supplemented with information obtained from the RFA performed at the Station and other UST reports prepared for the Station. While significant information is presented in Table 3-7 for the MCAS El Toro USTs, some additional information and verification of current information is needed.

The Orange County Health Care Agency (OCHCA), Environmental Health Division regulates USTs in the County and is the lead agency for UST compliance for the Station. However, if a UST leaks and causes significant contamination, the RWQCB oversees cleanup and issues closure. OCHCA requires that UST monitoring systems be installed at all USTs on-Station before a permit to operate USTs is issued to the Station.

The Station is currently in the process of installing UST monitoring systems at UST sites on-Station. A draft UST monitoring plan for the Station was prepared under the CLEAN I Program (contract No. N68711-89D-9296) in February 1993 (Jacobs 1993c). The plan called for vadose zone monitoring at 32 USTs and monitoring using a quantitative release detection method at 25 USTs. There are five USTs on-Station (Tank Farm 555) for which current monitoring technologies do not exist. These 567,000-gallon tanks store JP-5 fuel. Some testing of soil gas at these tanks was conducted in November 1993. During these tests, elevated petroleum levels were measured. The Station is working with OCHCA to develop appropriate monitoring techniques for these tanks. After all the monitoring systems have been installed, it is anticipated that a permit to operate USTs will be issued to the Station.

One UST location at the Station (Tank 398) has been the subject of extensive investigations being performed under the CLEAN I Program (CTO-0150). This UST site is located in the northeast quadrant of the Station, approximately 1,500 feet northwest of Tank Farm 6. Tank 398 has been removed and replaced with USTs 902A, 902B, and 902C. Field investigations have identified JP-5, as well as benzene, toluene, ethylbenzene, and xylenes (BTEX), in groundwater in the vicinity of this location. The extent of the contaminant plume is shown in Figure 3-1. This plume represents a composite of contaminant contours (contours correspond to analytical detection limits) based on a 1993 investigative report (Jacobs 1993d). The final construction/operations plans for free product (JP-5) removal and responses to all review comments on the draft plan were completed in mid-1995. Construction of the system began in July 1995, and start-up activities began in November 1995. The system is expected to be operational in early 1996 with an initial 12-month operation period.

Petroleum hydrocarbon plumes in groundwater have been identified in two other areas at the Station. In the northeast quadrant of the Station, elevated petroleum hydrocarbon levels have been found in groundwater downgradient of Tank Farms 5 and 6. In the northwest quadrant of the Station, elevated petroleum hydrocarbons have been found in wells located cross-gradient and downgradient of Tank Farm 2. Other potential sources of these contaminants include IRP Site 3 (plume near Tank Farms 5 and 6) and IRP Sites 13 and 15 (plume near Tank Farm 2). These tank farms are planned for investigation as potential sources of the benzene detected in groundwater in these two areas. The locations of these tank farms are shown in Figure 3-2c.

The Station has formed a UST Tiger Team to address UST issues. Members of the Tiger Team include representatives from the Station EO, Engineering Department, BRAC Office, and SWDIV. The goals and objectives of the Tiger Team include the following:

- develop strategies for UST management with respect to compliance;
- prioritize UST removals;
- develop plans for eventual closure of all USTs; and
- update and maintain the UST inventory database presented in Table 3-7.

The Tiger Team will meet regularly to assess the status of the UST program with respect to compliance and base closure issues.

A work plan was developed in 1995 to assess tank removal sampling results for 43 former UST locations at the Station and to provide recommendations for closure or further action (i.e., additional investigation and/or remedial action). In this plan, the tanks were preliminarily divided into the following three categories.

- Immediate closure recommended – Fifteen site assessment reports recommending closure have been completed as of 31 December 1995. The RWQCB and OCHCA have approved closure of 41 sites, including 9 of the

15 sites for which site assessment reports were prepared. The remaining 6 sites are pending approval from the Navy and agencies.

- Limited investigation required – Eighteen sites were investigated during mid-1995 to assess the extent of contamination detected during removal activities.
- Remedial action required – A contract was awarded to the remedial action contractor during 1995 for remediation of over 40 UST sites. The draft work plan was submitted to the BCT for review and comments. Responses to review comments were completed and the final work plan was completed in 1995. Remedial construction activities are expected to begin in early 1996.

3.2.1.2 Aboveground Storage Tanks

There are currently 18 ASTs identified at MCAS El Toro; all but four are active. An inventory of ASTs at the Station is provided in Table 3-8 (Aboveground Storage Tank Inventory). Compliance issues for ASTs are managed by the MCAS El Toro EO. Operation and maintenance activities for ASTs are the responsibility of the Station AC/S Installations Department.

The RWQCB Santa Ana regulates ASTs storing petroleum products under the state 1990 Aboveground Petroleum Storage Act, amended in 1991. The law requires petroleum AST facilities with a single-tank capacity of greater than 660 gallons or a cumulative capacity of greater than 1,320 gallons to 1) file a storage statement, 2) take action to prevent spills, and 3) monitor groundwater, if necessary. To date, the Station has not filed AST storage statements with the RWQCB Santa Ana.

3.2.1.3 Fuel Supply Pipelines

Fuel supply facilities at MCAS El Toro are the responsibility of the Station Supply Department. JP-5 is received at MCAS El Toro via pipeline from an off-Station source and is distributed at the Station through a series of underground pipelines. The layout of the fuel supply pipelines is shown in Figures 3-1, 3-2c, and 3-2d.

JP-5 is supplied to MCAS El Toro via a 12-inch-diameter pipeline from Norwalk, California. The pipeline enters the Station from the northwest and supplies JP-5 to USTs in Tank Farm 555 located in the northeast portion of the Station. The pipeline is operated by the Defense Fuel Supply Center (DFSC) and, therefore, is not an asset of MCAS El Toro. Any contamination resulting from the past or present operation of the pipeline will be addressed by DFSC.

Tank Farm 555 supplies JP-5 jet fuel through two steel pipelines (12- and 8-inch diameters) to Tank Farm 5. In the past, Tank Farm 5 supplied fuel to UST 398, which has been removed and replaced with three USTs (902A, 902B, and 902C). These tanks supply eight direct refueling pantographs (Buildings 903, 904, 905, 906, 907, 908, 909, and 910).

A 6-inch-diameter carbon steel fuel line is tied into one of the pipelines that extends from Tank Farm 555 to Tank Farm 5. This 6-inch pipeline supplies JP-5 to two 2-

day, 30,000-gallon USTs (414A and 414B) located in the southeast quadrant of the Station. A 400 gallon fuel recovery tank (414C) is also located in the vicinity of USTs 414A and 414B. From these USTs, the fuel is pumped to two high-speed refueling lanes located in the same area.

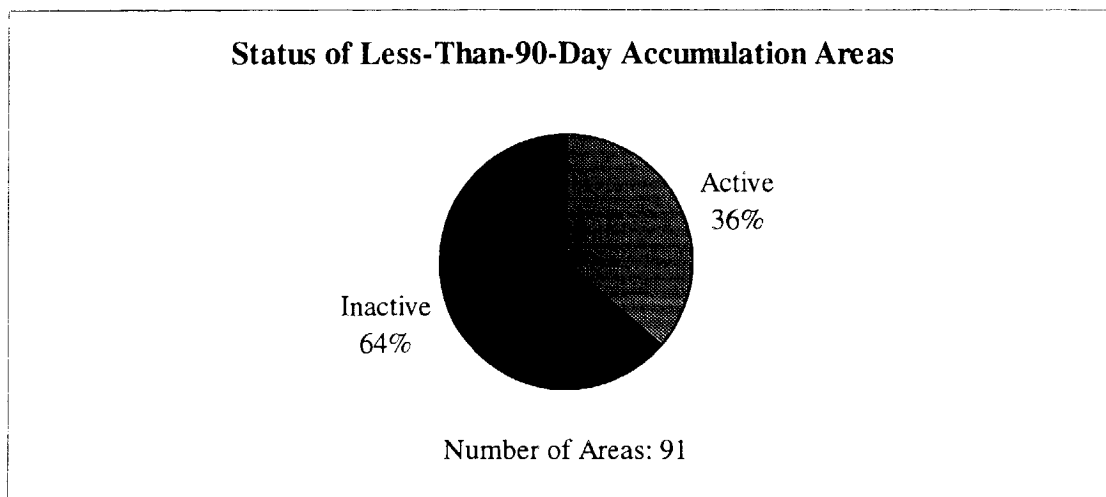
3.2.2 Hazardous Materials/Waste Management

Hazardous wastes generated at MCAS El Toro are accumulated in containers at tenant-managed, less-than-90-day accumulation areas (accumulation areas). A total of 91 past and current accumulation areas have been identified on-Station. Of these, 33 accumulation areas are currently in operation at the Station. A list of these accumulation areas is provided in Table 3-9 (Less-Than-90-Day Accumulation Area Inventory). Many of these accumulation areas were investigated during the RFA performed at the Station during 1990 to 1993 (Section 3.2.7). Accumulation areas at the Station are managed in accordance with all applicable federal, state, and local environmental laws and regulations. Exhibit 3-3 shows the status of less-than-90-day accumulation areas. Hazardous wastes are generated by various on-Station tenants. The tenants are responsible for day-to-day management of the accumulation areas; the MCAS El Toro EO oversees the tenants' operation at the accumulation areas. It is Station policy to store hazardous wastes at the accumulation areas for no longer than 45 days after the accumulation date indicated on the storage containers. Prior to 45 days after the accumulation date, wastes at the accumulation areas are managed according to waste type as described below.

3.2.2.1 Waste Oil

Waste oil is stored in 55-gallon drums at the tenant accumulation areas. The drums are transferred to Building 326, located in the southwest quadrant of the Station, for pickup by a recycling contractor. The contractor transports the waste oil off-Station to be recycled. Some Station tenants generate large amounts of waste oil. In these cases, the recycling contractor picks up the waste oil directly at the tenant accumulation areas.

Exhibit 3-3



Source: Table 3-9

3.2.2.2 Waste JP-5

Waste jet fuel is stored in 55-gallon drums at the tenant accumulation areas. The AC/S Installations Department pump truck is used to collect the waste fuel and transfer it to AST 862, located in the southwest quadrant of the Station. Accumulation dates are recorded at the tank. A recycling contractor picks up the waste fuel from the tank within 90 days of the oldest accumulation date. The JP-5 is recycled off-Station.

3.2.2.3 Miscellaneous Hazardous Wastes

Various other hazardous wastes are transferred to the Station EO less-than-90-day accumulation area located at Building 900. The DRMO is responsible for arranging for the wastes to be transferred off-Station within 90 days of the accumulation date.

On-site visual inspections at the majority of the accumulation areas have been performed by the CLEAN II contractor as a part of the draft final RFA addendum. The accumulation areas were inspected for visual evidence of releases. The contractor has developed removal and/or decontamination strategies for each of the accumulation areas which are available in the draft final RFA addendum (BNI 1995b).

Solvent cleaning machines manufactured by Safety-Kleen are used at various locations at the Station. Safety-Kleen regularly replaces the solvents in these machines at the Station. The waste solvents are transported off-Station by Safety-Kleen.

The Station operated a RCRA-permitted storage facility at Building 673-T3 until August 1994. On 21 December 1994, the Station notified DTSC that waste storage at this building had ceased and closure would be performed. The Station submitted its Final Closure Certification Report for Building 673-T3 to DTSC on 15 November 1995.

In addition to the accumulation areas described above, hazardous wastes generated overseas during Desert Storm operations were temporarily stored on-Station in 1991. From about August to November 1991, wastes, including lubricants, adhesives, paints, and cleaning compounds, were stored in the southeast portion of the Station, east of DRMO Storage Yard No. 3. The location of this area is shown in Figure 3-1. Because most of this area is unpaved, the waste containers were stored on plastic sheeting. The wastes were transported off-Station by contractors in 1991. Although no releases were reported by the Station EO, this area should be further evaluated.

Pesticides and herbicides have been used at the Station to control rodents and weeds. The AC/S Installations Department, Utilities and Maintenance Division, currently maintains a 6-month to 1-year supply of pesticides in Building 753. Pesticides were formerly stored in Building 493. In addition, the golf course has stored pesticides in Building 1687 and, prior to 1959, in the area occupied by Building 464 (Brown and Caldwell 1986). Buildings 493 and 1687 were demolished in 1987. The locations of these pesticide storage areas are shown in Figure 3-1. In addition to the pesticide and herbicide application operations that are conducted by Station personnel, a certified pest controller is contracted to control roaches, spiders, ants, and other pests.

3.2.3 Solid Waste Management

The Solid Waste Management Program at MCAS El Toro is handled primarily through contracts with disposal services. Federal Disposal Services (FDS) currently provides the disposal service to both the operational and housing areas at MCAS El Toro. In addition, FDS provides curbside recycling in the housing areas and has set up several locations on the Station where dumpsters for recyclable materials can be accessed. FDS provides some small-scale asbestos disposal services for abatement projects performed by MCAS El Toro Maintenance personnel. When asbestos materials are transported, FDS provides the Station with the manifest (The Environment Company 1992).

Infectious waste generated at the medical and dental clinics is handled by Browning Ferris Industries (BFI). BFI picks up the infectious waste and transports it off-Station for incineration. BFI provides a disposal manifest to the Station for the activity (The Environment Company 1992). Prior to using BFI for infectious waste disposal, these wastes were trucked from MCAS El Toro to the Naval Station Long Beach, California (Brown and Caldwell 1986).

3.2.4 Polychlorinated Biphenyls

A PCB management plan was developed for MCAS El Toro in April 1994 (SAIC 1994). It presents applicable federal, state, and local requirements; and it describes the Station system for handling and disposing PCBs in compliance with applicable regulations and Marine Corps policy. PCB-containing equipment at the Station is managed by MCAS El Toro AC/S Installations.

PCBs are regulated under the Toxic Substances Control Act (TSCA) (40 *Code of Federal Regulations* [CFR] 761). U.S. EPA classifies PCB units as follows:

- 0 to 49 parts per million (ppm) – non-PCB item;
- 50 to 499 ppm – PCB-contaminated item; and
- 500 ppm or greater – PCB item.

In addition, *California Code of Regulations* (CCR) Title 22 classifies PCB-containing liquids removed from equipment as hazardous waste. According to Title 22, liquids with PCB concentrations greater than or equal to 5 milligrams per liter (mg/L) must be disposed by incineration or treated to achieve a PCB concentration of less than 2 mg/L.

3.2.4.1 PCB Transformers

There are 115 existing or former PCB transformers at MCAS El Toro. Information on these transformers is provided in Table 3-10 (PCB Transformer Inventory). In the March 1994 version of the BCP, a total of 109 existing or former PCB transformers locations were identified from past surveys and the Navy-wide PCB database maintained by the Naval Facilities Engineering Services Center (NFESC). At that time, the BCT believed that the available information for PCB transformers needed

verification. To address this concern, a PCB transformer survey was conducted in late 1994 with the following objectives.

- Verify the status of PCB transformers identified in the March 1994 version of the BCP.
- Visually inspect PCB transformer locations for evidence of releases of dielectric fluid.
- Identify and inspect additional PCB transformer locations found during the field survey.

Of the 109 transformer locations identified in the 1994 version of the BCP, visual inspections were performed at 96 locations during the field survey; the other 13 transformer locations were not inspected because the associated building had been demolished and either no evidence of the former transformer location was found (5 locations), or the location could not be identified in the field after a thorough investigation (8 locations).

Two types of transformers are used at the Station: pad-mounted and pole-mounted. A total of 58 pad-transformer locations were identified and inspected; transformers were present at 50 of these locations. The original PCB transformers have been replaced with non-PCB transformers at all but three of these locations. The three PCB transformers are located in Building 6 (Database Tracking No. PCBT1) and Building 371 (Database Tracking Nos. PCBT56 and PCBT57). These three PCB transformers are to be replaced under a multitrade contract N68711-94-0682 by February 1996.

Thirty-eight pole-mounted transformer locations were visited during the survey. Transformers were present at 19 of the 38 locations visited. Because these transformers were located at least 20 feet above the ground surface, close inspection of the transformers could not be performed; therefore, transformer identification numbers could not be verified. A visual inspection of the ground surface at the base of the poles was performed, and no evidence of release was observed at the 38 locations.

In addition to the transformer locations discussed above, three additional PCB transformer locations (six transformers) were identified during the field survey, bringing the total number of PCB transformers to 115. These transformers are located at Buildings 271 (three transformers) and 833 (three transformers). Both locations have placards indicating the presence of PCBs. No evidence of release was observed at these locations. Information on these transformers is provided in Table 3-10.

One transformer location was investigated in the RFA performed at the Station. A PCB release reportedly occurred from the transformer located on the southern side of Building 457 (Database Tracking No. PCBT74), identified as SWMU/AOC 244. Shallow soil samples were collected at this location. PCBs were detected in one out of seven samples. This SWMU/AOC was investigated in 1995 and recommended for transfer to the Remedial Action Contract (RAC) contractor for limited surface soil cleanup of PCBs (BNI 1995b).

According to U.S. EPA Region IX, the presence of operating PCB transformers does not necessarily preclude the transfer of Station property. The U.S. EPA only considers PCB transformer locations to be an environmental concern if a release has occurred (Nurre, pers. com. 1995).

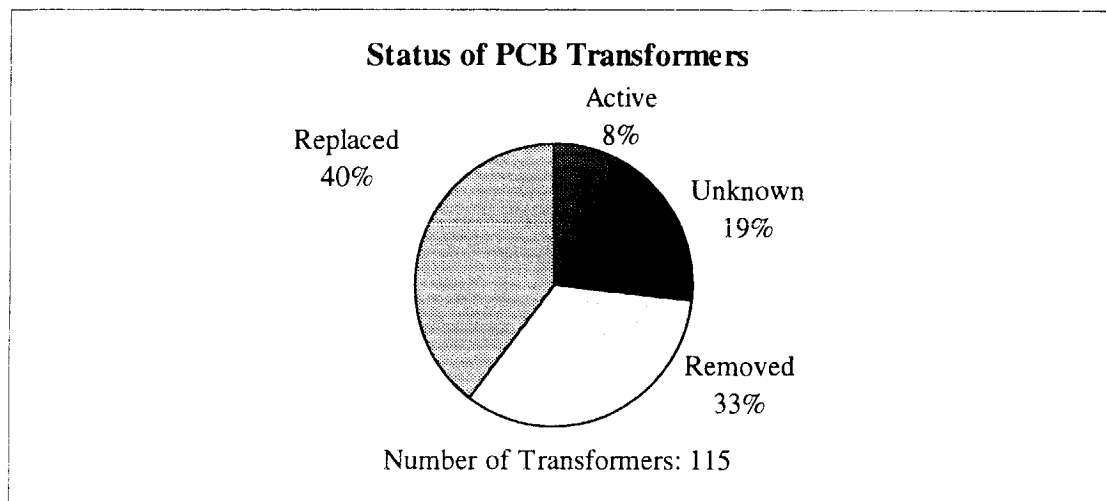
Of the 115 PCB transformer locations identified at the Station, releases are known to have occurred at only 2 PCB transformer locations (Database Tracking Nos. PCBT56 and PCBT74). As previously discussed, transformer PCBT74 was investigated during RFA addendum activities. The release at transformer PCBT56 must be evaluated to determine if PCBs have been released. The remaining PCB transformer locations at the Station are not considered to be an environmental concern. Exhibit 3-4 shows the status of PCB transformers.

3.2.4.2 PCB Transformers And Equipment Storage Areas

Four locations at MCAS El Toro have been used previously as storage areas for inactive PCB-containing transformers and/or equipment. These storage areas are located in the southwest quadrant of the Station (Figure 3-1).

One former transformer storage area is located southwest of South Marine Way, east of Bee Canyon Wash. The area was investigated as SWMU/AOC 7 in the RFA and the addendum to the RFA (1995) (Jacobs 1993e, BNI 1995b). This unpaved, fenced 2-acre storage area was established in 1990 or 1991. It was intended to temporarily store transformers until they could be disposed off-Station. Approximately 20 to 30 transformers were stored in this area at the time of the RFA visual site inspection (VSI) in 1991. No transformers are currently stored in this area. As part of the RFA and the addendum to the RFA, soil samples were collected in the storage area.

Exhibit 3-4



Source: Table 3-10

A second transformer storage area is located on the north side of Building 369. Portions of the area are paved. A portion of this storage area is being investigated in the RI/FS. IRP Site 11 (Transformer Storage Area) is a 30-square-foot concrete pad located in the south-central portion of the storage area where leaks from PCB transformers have been documented. Approximately 50 to 75 transformers were stored on this pad from 1968 to 1983 (Jacobs 1993b). The Site 11 boundaries encompass the storage pad, the unpaved areas bordering and to the north of the pad, and a lined drainage ditch south of the pad along the north side of Building 369.

A third transformer storage area is located adjacent to Tank 175 (water reservoir). This area was constructed in 1991 and consists of a concrete pad with concrete berms. This area is currently used for storage of non-PCB transformers only. However, according to MCAS El Toro Installations Department staff, one PCB-containing transformer was stored in this area for a short time in the past (Sherwood, pers. com. 1994).

A fourth PCB equipment storage area was identified at the equipment and drum storage area located on the north side of Building 324. During a routine site visit to MCAS El Toro, the CLEAN I contractor discovered miscellaneous electronic equipment (e.g., switches, capacitors) stored in the vicinity of a drum storage area near Building 324. The items were labeled with hazardous waste stickers that indicated the contents as PCB-containing. The labels indicated that the items were in the custody of the DRMO. These items have been removed from the storage area and disposed off-Station by an authorized disposal contractor.

3.2.4.3 Non-Transformer PCB Items

In 1991, Kennedy/Jenks Consultants conducted a survey of MCAS El Toro for items and equipment that possibly contain PCBs (Kennedy/Jenks Consultants 1991). The objective of the survey was to identify PCB items/equipment, other than PCB transformers, that are regulated under federal and state regulations. Approximately 400 buildings were surveyed for possible PCB-containing items and equipment. Transformers and fluorescent light fixtures were excluded from this survey. Items containing dielectric fluid suspected of containing PCBs were sampled and analyzed. The survey identified 54 items suspected of containing PCB insulation or fluid. Twenty-nine of these items contained dielectric fluid and were sampled and analyzed for PCB content. Table 3-11 (Non-Transformer PCB Equipment) lists these 29 items and summarizes their analytical results. Because these 29 items are below 50 ppm, they are classified in Toxic Substances Control Act (TSCA) as non-PCB items and are not required to be removed from service. However, when these 29 items are disposed, the oil must be manifested as PCB oil.

Ballasts in fluorescent light fixtures made prior to 1980 may contain PCBs. However, a survey of Station buildings for PCB light ballasts is not required, nor is one scheduled to be performed as part of base closure.

3.2.5 Asbestos

MCAS El Toro manages asbestos-containing materials (ACM) according to DoD policy established in a letter dated 02 November 1994. The policy requires the Station to manage "ACM in a manner protective of human health and the environment, and to comply with all applicable Federal, State, and local laws and regulations governing ACM."

Prior to property disposal, the Station is required to document all available information concerning ACM. Documented information should include:

- readily available information on the type, location, and condition of asbestos;
- any results of testing for asbestos;
- description of any asbestos control measures taken;
- any available information on costs or time necessary to remove the remaining ACM; and
- results of a site-specific update of the asbestos inventory performed to revalidate the condition of ACM.

Identified ACM will be remediated only if it is not in compliance with applicable laws and regulations or if it poses a threat to human health at the time of property transfer. In the property transfer process, remediation of ACM is not required for the following scenarios:

- the building is scheduled for demolition by the transferee;
- the transfer document prohibits occupation of the buildings prior to its demolition; and
- the transferee assumes responsibility for the management of any ACM in accordance with applicable laws.

A draft Asbestos Management Plan and a draft Asbestos Operating Plan were prepared for the Station in January and February 1992, respectively. The objectives of the Asbestos Management Plan were to:

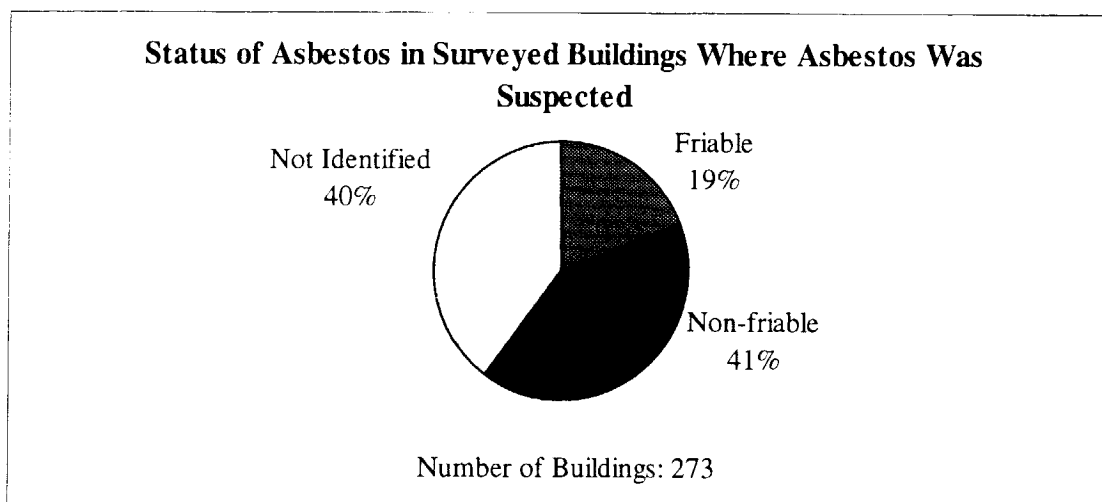
- identify ACM in facility buildings;
- assess the hazard potential of identified ACM;
- establish policies for handling ACM on-Station;
- define organizational roles and responsibilities of the Asbestos Management Program; and
- assure that maintenance workers, as well as building occupants, are not exposed to elevated airborne asbestos fiber concentrations as a result of deteriorated ACM or inappropriate work practices.

The goals and objectives of the Asbestos Operating Plan include:

- establishing policies for conducting maintenance activities on or around known ACM;
- defining proper procedures for handling an emergency response to an asbestos hazard;
- outlining policies for remediation activities; and
- detailing proper disposal procedures for ACM.

Several ACM surveys in buildings at MCAS El Toro have been conducted (Ecology and Environment 1991a,b, 1992; IT Corporation 1989). According to the Station P-164 building database, a total of 506 nonresidential buildings are located on-Station. Approximately 54 percent (273 buildings) of these 506 buildings at MCAS El Toro were inspected during the surveys. ACM was identified in 164 of the buildings; three of these buildings have been demolished, bringing the total number of buildings with identified ACM to 161. Of the 164 buildings with identified ACM, 52 contained friable ACM. Friable ACM is ACM that is easily pulverized (e.g., with light contact) and thus can become airborne, making it a human health hazard. All 273 buildings, along with the results of the surveys, are listed in Table 3-12 (Buildings with Known Asbestos) and are summarized in Exhibit 3-5. No ACM was identified in the other 109 buildings surveyed. Although ACM was not found in these 109 buildings, an asbestos survey may be performed before remodeling or demolition activities are undertaken.

Exhibit 3-5



Source: Table 3-12

The Navy Public Works Center (PWC) San Diego recently completed a survey of family housing communities at MCAS El Toro and MCAS Tustin. Five family housing units were located at MCAS El Toro. As part of this survey, the family housing units were tested in accordance with the applicable standards and Naval Facilities (NAVFAC) guidance. Final results indicated that asbestos was present in many of the units surveyed; however, none of the ACM is considered to be a threat to human health (DON 1995a–e).

3.2.6 Radon

Radon is a radioactive gas produced by the disintegration of elemental uranium. Uranium, which originates from magma, predominantly occurs in granitic rock. Radon is an inert gas that readily migrates from bedrock and soil into the groundwater or air. Radon levels in buildings are a function of underlying soils and rock, and building construction and ventilation. Radon may enter structures through basements, openings around pipes, sumps, cracks in floors, furnaces, and vents.

Because radon can readily migrate into groundwater, the levels of radon in groundwater can provide information on levels of radon that could migrate into air. Literature indicates that groundwater in Orange County, California, generally has the lowest radon concentrations in the nation at less than 100 picocuries per liter (pCi/L) (Michael 1990). Therefore, elevated levels of radon would not be expected in buildings at MCAS El Toro.

TSCA requires that radon studies be conducted in federal buildings and that the results be reported to U.S. EPA. Navy guidance requires that naval buildings and housing units occupied for more than 4 hours per day to be tested for radon.

In accordance with the Indoor Radon Abatement provisions of Subchapter III of TSCA, the DoD directed the Station to assess radon levels in a representative sample of its buildings. As part of the voluntary DoD approach to reducing radon exposure, the DoD has required that U.S. EPA guidelines for residential structures be applied to remedial actions for radon.

In 1991, a radon survey was conducted at MCAS El Toro in response to the Navy Radon Assessment and Mitigation Program (NAVRAMP). The NAVRAMP program followed U.S. EPA guidelines that consider airborne radon levels of 4 pCi/L or less as low-risk levels that do not require mitigative action.

The radon survey included the Station hospital (Building 431), the child care center (Building 656), and approximately 185 locations in the family housing area. The radon screening results indicated that no facilities or housing units sampled exceeded radon levels of 4 pCi/L. Thus, additional testing or mitigation is not required.

Although DoD policy does not require that radon assessment and mitigation be performed prior to transfer of BRAC property, any available and relevant radon assessment data should be included in property transfer documents.

Station building records indicate that radium paint has been used previously in Building 296. According to a building plan from 1944, a radium paint room was

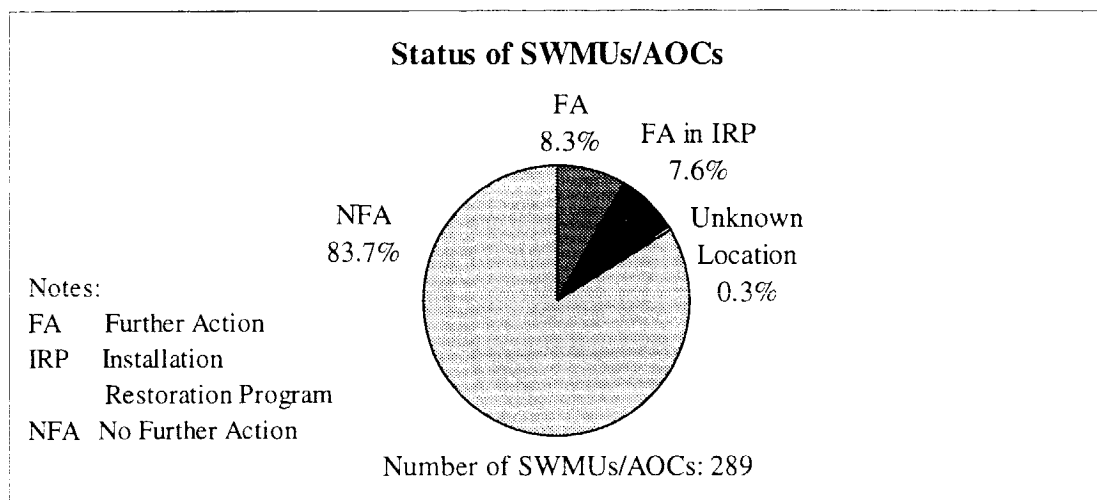
present on the second floor in the northeast corner of Building 296. Aircraft refurbishing operations are known to have occurred in Buildings 296 and 297 for a short period in the 1940s; however, information on waste management associated with radium painting activities is not available. Former Station personnel interviewed in 1994 were asked about radium paint usage on-Station, but they were not able to provide additional information.

3.2.7 RCRA Facilities (SWMUs)

An RFA was performed for the Station from 1990 to 1993. The objectives of the RFA were to identify and evaluate SWMUs and other AOCs with respect to the potential for releases of hazardous wastes to the environment, and to assess the need for further action at the SWMUs/AOCs. An additional objective of the RFA at MCAS El Toro was to identify potential sites for a fourth OU for the IRP (OU-4).

The final RFA report was submitted on 16 July 1993. This study identified 307 SWMUs/AOCs. A total of 304 SWMUs/AOCs were located at MCAS El Toro (3 SWMUs/AOCs were located at MCAS Tustin) and 15 SWMUs/AOCs were duplicates of other SWMUs/AOCs, resulting in 289 SWMUs/AOCs that are of interest at MCAS El Toro. A comprehensive inventory of the SWMUs/AOCs identified during the RFA is provided in Table 3-13 (Summary of SWMUs/AOCs). Exhibit 3-6 summarizes the status of SWMUs and AOCs. Based on the results of the preliminary review (PR) and VSI, 140 SWMUs/AOCs were sampled during the RFA sampling visit to determine whether a release had occurred. The analytical results and recommendations for further action for the SWMUs/AOCs sampled are provided in the final RFA report (Jacobs 1993e).

Exhibit 3-6



Source: Table 3-13

Based on the sampling visit results, 25 SWMUs/AOCs were recommended for further action in the final RFA report. Five types of further action were recommended for SWMUs/AOCs:

1. **Include SWMU/AOC into a CERCLA program.** Eleven SWMUs/AOCs were recommended for further action in the RI/FS:

- 71 (less-than-90-day accumulation area) (Site 7),
- 72 (less-than-90-day accumulation area) (Site 7),
- 90 (former sewage treatment plant) (Site 12),
- 94 (less-than-90-day accumulation area) (Site 21),
- 104 (less-than-90-day accumulation area) (Site 8),
- 105 (less-than-90-day accumulation area) (Site 8),
- 106 (less-than-90-day accumulation area) (Site 8),
- 194 (former incinerator) (Site 3),
- 236 (less-than-90-day accumulation area) (Site 6)
- 265 (metal plating sewer lines) (Site 1), and
- 300 (solvent spill area) (Site 3).

2. **Evaluate SWMU/AOC in a state program with additional borings.** SWMUs/AOCs with petroleum hydrocarbon contamination only and unknown extent of contamination were recommended for further action in a state program. Seven SWMUs/AOCs fall into this category of further action:

- 46 (Equipment Storage Yard),
- 131 (Engine Test Cell),
- 145 (UST),
- 173 (OWS),
- 175 (UST),
- 176 (UST), and
- 280 (UST).

SWMUs/AOCs with potential shallow contamination (i.e., SWMUs/AOCs with an immobile contaminant such as PCB or semivolatile organic compound (SVOC) present in a 10-foot sample) were recommended for further action in a state program. Three SWMUs/AOCs fall into this category:

- 39 (less-than-90-day accumulation area),
- 88 (less-than-90-day accumulation area), and
- 171 (less-than-90-day accumulation area).

3. **Repair cracks in paved area and leave soil in place.** Seven SWMUs/AOCs were recommended for further action in a Navy program to repair cracked concrete to prevent future migration of moderate levels of petroleum hydrocarbons as a best management practice (BMP) for the Station. These seven SWMUs/AOCs include:
 - 14 (Drop Tank Storage Area),
 - 110 (Vehicle Wash Rack),
 - 198 (Vehicle Wash Rack),
 - 201 (Vehicle Wash Rack),
 - 204 (Vehicle Wash Rack),
 - 213 (Vehicle Wash Rack), and
 - 260 (AST).
4. **Evaluate UST or OWS in a state program.** Four SWMUs/AOCs with moderate levels of petroleum hydrocarbons adjacent to a tank bottom were recommended for further action (such as a leak test or inspection or removal) to assess whether the tank is releasing petroleum hydrocarbons to the soil. These four SWMUs/AOCs include:
 - 84 (OWS),
 - 151 (OWS),
 - 199 (OWS), and
 - 298 (UST).
5. **Excavate shallow, stained soil.** The following two SWMUs/AOCs had stains on an adjacent unpaved area:
 - 26 (less-than-90-day accumulation area), and
 - 33 (less-than-90-day accumulation area)

The RFA recommended that the shallow, stained soil at these SWMUs/AOCs be excavated and properly disposed. In addition, it was recommended that the Station no longer store drums outside of the storage areas.

The status of the remaining SWMUs/AOCs recommended for further action in the RFA is as follows:

- further investigation at SWMUs/AOCs 194 and 300 will be conducted in the IRP under Site 3;
- further investigation at the UST locations (SWMUs/AOCs 145, 175, 176, 280, and 298) is pending; these locations will be addressed under the compliance program for USTs;
- further investigation at the OWS locations (SWMUs/AOCs 84, 151, 173, and 199) is pending; these locations will be addressed under the compliance program for OWSs;

- repair of cracks in pavement at the vehicle wash racks (SWMUs/AOCs 110, 198, 201, 204, and 213) and Drop Tank Storage Area (SWMU/AOC 14) is pending; and
- removal of stained soil at the less-than-90-day storage areas (SWMUs/AOCs 26 and 33) is pending.

Some SWMUs/AOCs not recommended for further action by the RFA have been included in the Station IRP. In response to agency comments, SWMU/AOC 90 (Former Sewage Treatment Plant) has been included for further investigation in IRP Site 12 (Sludge Drying Beds). IRP Site 25 (Station Washes) will address the four Station washes identified as SWMUs/AOCs in the RFA (i.e., SWMUs/AOCs 3 [Marshburn Channel], 4 [Bee Canyon Wash], 5 [Borrego Canyon Wash], and 11 [Agua Chinon Wash]).

No SWMUs/AOCs were recommended for inclusion into a fourth OU.

In a letter dated 17 May 1994, DTSC approved the RFA under the conditions that further investigation (i.e., sampling) be performed. During the RFA addendum field activities, 13 SWMUs/AOCs and 1 temporary accumulation area (TAA) were investigated. Five of the SWMUs/AOCs had already been recommended for further investigation in the RFA (SWMUs/AOCs 39, 46, 88, 131, and 171). The eight additional SWMUs/AOCs and 1 TAA investigated were:

- SWMU/AOC 7 (Transformer Storage Area),
- SWMU/AOC 9 (Fuel Bladder East of Agua Chinon Wash),
- SWMU/AOC 165 (Drum Storage Area),
- SWMU/AOC 229 (Hazardous Waste Storage Area),
- SWMU/AOC 244 (PCB Spill Area),
- SWMU/AOC 260 (Former AST) (RFA recommended further action [e.g., repair cracks in pavement], but not further investigation at this SWMU/AOC),
- SWMU/AOC 264 (DRMO Storage Yard #3),
- SWMU/AOC 267 (Drop Tank Fuel Storage Area), and
- TAA 7 (Hazardous Waste Storage Area).

The draft final addendum to the RFA was completed in December 1995. The report presented the results and recommendations for remedial actions for 13 SWMUs/AOCs and one TAA in addition to recommendations for closure strategies of 73 additional TAAs. Five of the 14 locations sampled were duplicates of TAAs. Therefore, a total of 82 sites were investigated in draft final addendum to the RFA. Of the 14 sites sampled, five were recommended for transfer to the RAC contractor for limited surface soil removal (Sites 7, 46, 88, 131, and 244) and nine were recommended for no further action (Sites 9, 39, 171, 229, 260, 264, 267, and TAA 7). Of the 73 TAAs surveyed, the draft final addendum to the RFA recommended the following:

- twenty-one TAAs are clean and vacant (as of November 1995),
- forty-two are recommended for wash down after removal of stored material,
- eight are recommended for simple decontamination and wash down after material removal,
- one is recommended for transfer to the RAC for surface soil removal (PCBs), and
- one will be reevaluated upon base closure.

A soil gas survey for IRP Sites 24 (Possible VOC Source Area) and 25 (Major Drainages) was completed in October 1994. The survey encompassed numerous SWMUs/AOCs located in the southwest quadrant of the Station. Sites 24 and 25 will be further investigated in the Phase II RI.

3.2.8 NPDES Permits

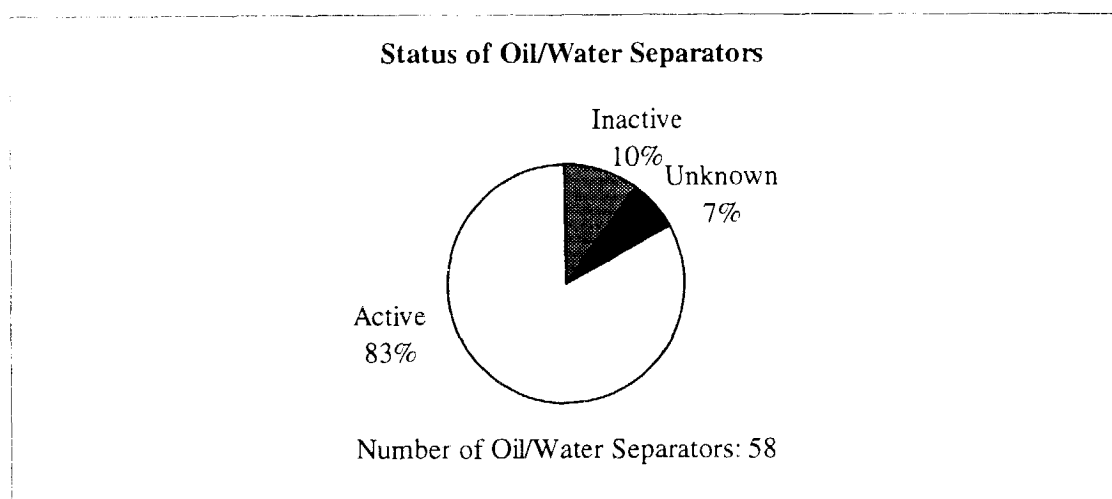
Storm water runoff from the aircraft runways, parking areas, aircraft and vehicle maintenance areas, wash rack areas, and fueling areas from the Station is discharged into three washes (Marshburn Channel, Bee Canyon Wash, and Agua Chinon Wash), which are tributaries of San Diego Creek. Discharges from these washes are addressed by a NPDES permit (Order No. 93-16, NPDES No. CA 0106593) issued to the Station by the RWQCB, Santa Ana Region. The Station EO is responsible for collecting discharge samples that result from significant rainstorm events or other water discharge events. The Station is currently in compliance with the NPDES permit. The permit expires on 01 March 1998.

Discharges to the sanitary sewer at MCAS El Toro are regulated by the County Sanitation Districts of Orange County (the Districts). The Districts have issued Station Industrial Wastewater Discharge Permit No. 14-1-135, which specifies effluent limits and monitoring and reporting requirements. The Station EO is responsible for monthly, quarterly, and semiannual monitoring of wastewater effluent. The permit was renewed on 01 May 1995 and is effective through 30 April 1997.

3.2.9 Oil/Water Separators

OWSs are used at various locations at MCAS El Toro for wastewater pre-treatment and meeting storm water discharge requirements. Fifty-seven OWSs are currently located at the Station. This total includes 45 active and six inactive OWSs; the status of six OWSs is unknown. Nineteen of the OWSs have USTs associated with them. A comprehensive list of the OWSs is provided in Table 3-14 (Oil/Water Separator Inventory). Exhibit 3-7 illustrates the status of OWSs.

Exhibit 3-7



Source: Table 3-14

OWSs are managed by the MCAS El Toro EO and are maintained by the Station Installations Department. Information on OWSs was obtained from the Station UST Inventory Database and an OWS survey that was conducted in 1993 (Law/Crandall 1993). This data was supplemented with information obtained from the RFA performed at the Station and interviews with Station personnel.

Most of the OWSs are underground units. Two OWSs, located at Agua Chinon Wash and Bee Canyon Wash, are constructed aboveground. In 1995, two additional aboveground units were constructed at the above-mentioned washes, and a third aboveground unit was installed at Building 658.

Under federal regulations, treatment units that are part of wastewater systems regulated under the NPDES program or which discharge to a publicly owned treatment works are exempt from hazardous waste permitting regulations. All OWSs at the Station are exempt from federal hazardous waste permitting regulations because the OWSs are used for treatment of wastewater discharge.

Under state regulations, treatment units with specified hazardous waste streams are subject to Permit by Rule (PBR) regulations under the CCR Title 22, Division 4.5. These regulations require facilities having treatment units defined under PBR regulations to notify DTSC. Additional requirements include contingency and closure plans, and certification that releases have not occurred. PBR regulations have been amended under Assembly Bill 1772 to create a multiple-tiered permitting program. Under the tiered system, some treatment units (e.g., OWSs) are conditionally exempt from PBR regulations. The revised PBR regulations became effective in January 1993; notifications to DTSC were due by 01 April 1993.

In 1993, MCAS El Toro notified DTSC of 21 OWSs located at the Station. On 01 January 1994, DTSC issued a conditional exemption for operation of these units. Table 3-14 indicates the OWSs specified in the conditional exemption. The DTSC authorization to operate will continue until the Station provides notification of stoppage of waste treatment and proper closure of the OWSs. The compliance status for the remaining OWSs needs to be confirmed for future updates of the BCP.

The Station Installations Department has completed cleaning and repairing 56 of a total of 58 OWSs. Some of the repairs include cleaning and/or replacing butterfly control valves, replacing faulty pumps, and adjusting alarm systems.

Removal and closure requirements for OWSs are described in CCR Title 22. USTs associated with the OWSs have different closure requirements and must be closed under CCR Title 23.

3.2.10 Silver Recovery Units

In addition to the treatment units (i.e., OWSs) discussed in Section 3.2.9, two silver recovery units are operated at the Station. Silver recovery units are located at the Station photography laboratory (Building 443) and medical clinic (Building 439).

These treatment units are regulated in the same manner as OWSs under PBR regulations. The silver recovery units are included in the conditional exemption issued to the Station by DTSC on 01 January 1994. When the silver recovery units are removed, they must be closed under CCR Title 22.

In 1993, the Station photography laboratory was moved from Building 312 (located in the southwest portion of the Station) to Building 443 (the conditional exemption lists the photography laboratory in Building 312). Because silver recovery units were formerly located in Building 312, this location must be evaluated for possible releases. Both the current and former silver recovery unit locations are shown on Figure 3-1.

3.2.11 Lead-Based Paint

Navy policy regarding LBP on nonresidential structures was established in a policy letter dated 26 March 1992. This letter outlines policies on the use and control of LBP during maintenance, repair, and construction of new and existing nonresidential structures and facilities. The Navy policy regarding nonresidential structures states that painted surfaces of all facilities constructed, repaired, and/or maintained prior to 1980 should be assumed to contain lead.

According to Station building records, a total of 450 nonresidential buildings currently located on-Station were constructed prior to 1980. Navy guidance states that these structures should be assumed to contain LBP.

DoD policy regarding LBP for residential structures is addressed in a policy letter dated 02 November 1994. This policy states that LBP will be managed in a manner protective of human health and the environment, and to comply with all applicable federal, state, and local laws and regulations. Transfer of federal property for

residential use will be conducted in accordance with the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of Public Law 102-550). Under this provision, the following actions must be taken prior to the transfer of property.

- Housing constructed after 1960 and before 1978 must be inspected for LBP and LBP hazards. Results of the inspection must be provided to the prospective transferee of the property. These results must identify the presence of LBP and LBP hazards on a surface-by-surface basis. Abatement of the LBP or LBP hazard is not required. However, the prospective transferee must be provided a lead-hazard information pamphlet, and the contract for sale or lease must include a lead-warning statement.
- Housing constructed before 1960 must be inspected for LBP and LBP hazards. Results of the inspection must be provided to the prospective transferee of the property. These results must identify the presence of LBP and LBP hazards on a surface-by-surface basis. Abatement of all LBP or LBP hazard is required. A description of the abatement activities must be provided to the prospective transferee. Also, the prospective transferee must be provided a lead-hazard information pamphlet, and the contract for sale or lease must include a lead-warning statement.

The above requirements do not apply in the following cases:

- the building is scheduled for demolition by the transferee and the transfer document prohibits occupation of the building prior to the demolition;
- the building is scheduled for nonresidential use; or
- the building is scheduled for residential use and the transferee conducts renovation activities consistent with regulatory requirements for the abatement of LBP hazards.

According to the Station P-164 Building Database, there are a total of 2,511 residential structures (including 387 detached housing facilities). These MCAS El Toro facilities are located at both MCAS El Toro and MCAS Tustin.

The Navy PWC, San Diego, completed a survey of MCAS El Toro and MCAS Tustin family housing and related facilities for LBP in 1995. As part of this survey, family housing units were tested in accordance with the applicable standards and NAVFACENGCOM guidance. A total of five housing areas at MCAS El Toro were surveyed for LBP.

- Moffett Meadows/Saddleback Terrace Community (17 units located at MCAS El Toro).
- Namar Housing Community (216 units located at MCAS El Toro).
- San Joaquin Housing Community (300 units located at MCAS El Toro).
- Wherry Housing Community (553 units located at MCAS El Toro).
- Saddleback Terrace/Vista Terrace Housing Communities (100 units located at MCAS El Toro).

Results indicated that LBP was detected at high levels (Hazard Risk Assessment levels are identified as high, medium, and low) in three of the housing communities: Moffett Meadows/Saddleback Terrace Community (built in 1964), Wherry Housing Community (built in 1954), and Saddleback Terrace/Vista Terrace Housing Communities (built in 1947) (DON 1995a–e). Lead levels in all soil and dust sample results were either not detected or were below threshold limits. Moffett Meadows/Saddleback Terrace Community will not require abatement since it was built after 1960. However, the prospective transferee must be provided all results of the LBP inspection. These results must identify the presence of LBP or LBP hazard on a surface-by-surface basis. Depending on the reuse scenario, the Wherry Housing Community and Saddleback Terrace/Vista Terrace Housing communities may require abatement to eliminate LBP hazards in accordance with standards established by appropriate federal agencies. If the reuse scenario requires abatement measures, the following terms must be met.

- The removal of LBP and lead-contaminated dust, the replacement of lead-painted surfaces or fixtures, and the removal or covering of lead-contaminated soil.
- All preparation cleanup, disposal, and post-abatement clearance testing activities associated with such measures.

Abatement measures currently being considered include:

- replacement,
- encapsulation,
- paint removal on-site, and
- paint removal off-site.

3.2.12 Air

The Station currently operates under a single RECLAIM permit. The permit was initially issued to the Station by the South Coast Air Quality Management District (SCAQMD) in July 1994 and was renewed on 01 July 1995. The RECLAIM permit outlines all recording, monitoring, and reporting requirements for the Station. Under the RECLAIM permit, the Station is required to submit an annual air-emissions report to the SCAQMD.

Currently, there are 138 pieces of equipment at MCAS El Toro that are addressed under the RECLAIM permit. An additional 13 permit applications have been submitted and are awaiting approval and incorporation into the RECLAIM facility permit. Many other emissions sources at the Station are exempt from testing under SCAQMD Rule 219 due to their small size.

The SCAQMD is also currently revising its 20-year Air Quality Management Plan (AQMP). The goal of the AQMP is to reduce the total air emissions in California in an attempt to bring the state into compliance with the U.S. EPA air quality standards. An investigation has been conducted by the Station to assess the impact potential of

the AQMP to the Station. It was recommended in the 1991 Master Plan that the AQMP should continue to be monitored by the Station.

In addition to the air permits discussed above, the Station aircraft fire-fighting training exercises are also overseen by the SCAQMD. The Station has two concrete-lined burn pits located adjacent to IRP Site 16. The locations of these burn pits are shown in Figure 3-1. Both pits were constructed in 1988, but only one is being used. The western burn pit was only used once. It was retired because the concrete deteriorated during the initial burn event; however, no significant cracks are evident in the floor of the pit.

Only JP-5 is burned in the eastern pit. Burns typically last three to ten minutes and are conducted approximately four to six times per month. According to MCAS El Toro Crash Crew Department staff, Station policy is to notify the SCAQMD of all planned burns.

Assembly Bill (AB) 531 was passed by the California Assembly and signed into law on 12 October 1995. Briefly, it states that tactical military equipment will be exempt from local district permitting requirements. Instead, the state will establish a statewide registration program by 01 January 1997. Furthermore, any registered portable internal combustion engines, including any turbine, used by the DoD or the National Guard exclusively for military tactical support or other federal emergency purposes, will not be subjected to any statewide or district emission control or emission limit. Since the interim guidance for the period 12 October 1995 through 31 December 1996 is to comply with local district regulations, no changes will be made to this March 1996 BCP. Future revisions of this document will reflect changes that may result from the enactment of AB 531.

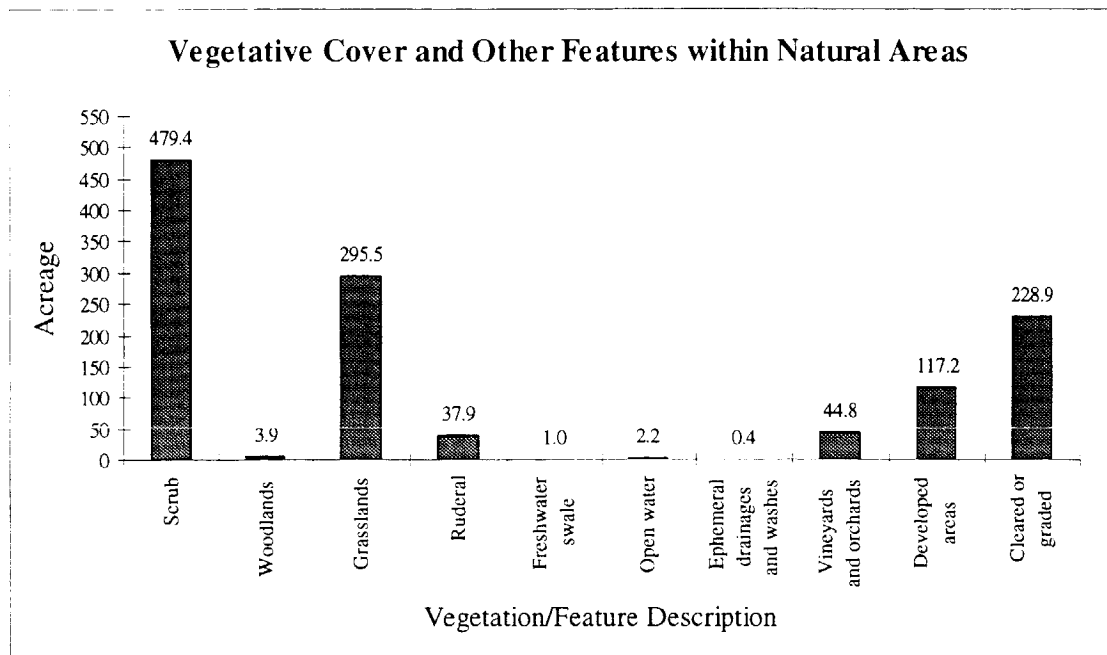
3.3 STATUS OF NATURAL AND CULTURAL RESOURCES

The following sections discuss the status of identification of natural and cultural resources at MCAS El Toro. These sections address threatened and endangered species, wetlands, surface waters, floodplains, archaeological resources, historic structures, and paleontological resources.

3.3.1 Ecological Resources

Approximately 75 percent of the native habitats of MCAS El Toro have been cleared for agriculture, housing, and Station operations. Native vegetation and animal species are primarily condensed in an approximately 1,200-acre area located in the northeast portion of the Station. Much of this natural area is undeveloped, although the exploded ordnance disposal (EOD) range, ordnance storage areas, pistol range, Fuel Farm 555, communications station, archery range, and numerous unpaved roads are within this area. Undisturbed areas within this natural area are generally covered with native vegetation, including coastal sage scrub, riparian scrub, and grassland communities. The extent of vegetation in this area is shown in Figure 3-3a (Vegetation Communities in Natural Area). A summary of the types of vegetative cover and other features within the natural area is provided in Table 3-15 (Vegetative

Exhibit 3-8



Source: Table 3-15

Cover and Other Features Within Natural Area). Exhibit 3-8 illustrates the extent of vegetative cover and other features within natural areas.

Military training operations that occur within this natural area include unit conditioning marches, land navigation courses, and combat vehicle training. It is also used by residents of Station housing (located on the northern site of the natural area) for jogging, hiking, and biking (D&M 1994).

The natural habitat located in this portion of the Station is inhabited by many wildlife species. The area is heavily used by numerous wintering avian species, including neotropical birds and birds of prey. In addition to bird species, reptiles and mammals are also present in the natural area, as well as a smaller number of amphibian species (D&M 1994).

Based on recent field surveys by U.S. Fish and Wildlife Service (USFWS) in 1993 and a study by Dames and Moore (D&M), various sensitive species are known to occur at MCAS El Toro at this time. These sensitive species include one amphibian, three reptilian, 12 avian, and four mammalian species that are known to occur at MCAS El Toro. Of these, only one species, the California gnatcatcher, is listed as threatened under the Federal Endangered Species Act, and none is listed under the California Endangered Species Act. Information on the presence of sensitive species was acquired through literature searches, including the California Natural Diversity Database (CNDDB) Rarefind Reports, the Orange County database, and contacts with the USFWS and California Department of Fish and Game (CDFG) (D&M 1994). The

sensitive species present at the Station are listed in Table 3-16 (Special-Status Wildlife Species at MCAS El Toro).

3.3.2 Wetlands and Waters

Based on a review of National Wetland Inventory maps and field surveys by D&M performed in July 1994, two seasonal ponds are evident at MCAS El Toro. The locations of these ponds are shown in Figure 3-3b (Wetlands and Waters in Natural Areas). One area, the stock pond, is artificial, but functions as a wetland. A 0.67-acre area of the pond qualifies as a jurisdictional wetland. The second area is a dense stand of mulefat scrub in a topographic depression that covers 0.24 acres, and is also considered a wetland (D&M 1994).

The D&M study identified two other features in the natural area that are considered "waters of the United States": Borrego Canyon Wash and Agua Chinon Wash. These features are shown in Figure 3-3b. Borrego Canyon Wash and its branches support some riparian vegetation. The average width of the ordinary high-water mark is up to 6 feet in most branches. These are identified as reaches A through D in Figure 3-3b. Agua Chinon Wash is located along the west side of the natural area and is a broad, shallow dry wash with mulefat scrub and a large stand of willows (D&M 1994). A natural spring area located adjacent to the Magazine Landfill site has recently been added to the wetland inventory. The size varies from wet to dry seasons with an average of 1.2 acres.

Further investigation will be required to determine the extent of wetlands and waters on the remaining portions of MCAS El Toro.

3.3.3 Floodplains

MCAS El Toro is situated at the outlets of four large canyons that produce storm flows during periods of heavy rainfall. Storm runoff from these canyons is channeled into Marshburn Channel, Bee Canyon Wash, Agua Chinon Wash, and Borrego Canyon Wash. The drainage channels flow southwesterly and are tributaries of San Diego Creek located southwest of the Station. Existing storm drain facilities on-Station consist of ditches and subsurface pipes that direct local runoff to the drainage channels (MCAS El Toro 1991).

The MCAS El Toro Master Plan indicates that much of the Station lies within the 100-year floodplain due to existing agricultural drains that cannot carry the urbanized 100-year flood. The predicted 100-year floodplain resulting from off-Station runoff covers nearly 40 percent of the Station. The area encompassed by the predicted 100-year flood is shown in Figure 3-3c (Natural and Cultural Resources Features). The Master Plan indicates that the potential flooding problems at the Station would be alleviated by the year 2001 from the phased implementation of the Orange County Flood Control District, San Diego Creek Flood Control Master Plan.

3.3.4 Archaeological Resources

In 1987, the U.S. Army Corps of Engineers (COE) conducted an Archaeological Resources Assessment to identify possible archaeological sites at MCAS El Toro

(COE 1987). The area surveyed was confined to the approximate 900-acre area of undisturbed native soils located in the northeast portion of the Station. Ten minor archaeological sites and eight isolated artifactual findings contained wholly or partially within the Station boundaries were identified. The locations of these archaeological sites are shown in Figure 3-3c. The sites and findings are principally located on ridge tops and at elevations above the Borrego Canyon Wash. According to the survey report, the majority of the findings observed during the assessment had been used by native American Indians for food gathering and processing. Seven of the 10 archaeological sites were recommended for further evaluation to determine whether they are eligible for nomination to the National Register of Historic Places.

An archaeological survey has not been performed for the remainder of MCAS El Toro.

3.3.5 Historic Structures

MCAS El Toro was established during World War II (WW II) and no structures earlier than this period are present at the Station. A survey of WW II-age buildings at the Station was performed by the COE as part of a nationwide effort funded by DoD and approved by the Council on Historic Preservation. The survey reported that the majority of the remaining WW II buildings at the Station have been greatly modified and are located in highly altered settings. The only building identified as possibly being eligible for listing on the National Historic Register was the Station theater (Building 271). The location of this building is shown in Figure 3-3c. The theater has been renovated numerous times, and it is unlikely that it will meet eligibility requirements for listing on the National Historic Register (Wilson, pers. com. 1994).

3.3.6 Paleontological Resources

A paleontological resources survey has not been performed at the Station. The area surrounding MCAS El Toro is known for its rich paleontological resources. Due to the impacts of construction on the main portion of the Station, it is unlikely that any valuable paleontological resources still remain in this area. Therefore, a conservation plan would not be required for this developed portion of the Station. Because the natural area (approximately 1,200 acres) is in a relatively undisturbed state, any significant construction related to reuse will be addressed in the disposal/reuse EIS (Wilson, pers. com. 1994 and 1995).

3.4 ENVIRONMENTAL CONDITION OF PROPERTY

The environmental condition of property at MCAS El Toro involves the categorization of the various LOCs identified at the Station into one of the seven DoD ECP categories identified in the BCP guidebook. LOCs are defined as locations or areas of environmental concern such as IRP sites, USTs, ASTs, OWSs, less-than-90-day accumulation areas, PCB transformer locations, RFA SWMUs/AOCs, buildings with ACM, and miscellaneous areas such as areas of potential environmental concern identified in aerial photographs and personnel interviews. These items are discussed

and tabulated in Sections 3.1 (Environmental Program Status) and 3.2 (Compliance Program Status).

The BCP guidebook defines the seven area types as follows:

1. Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas);
2. Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred);
3. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action;
4. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken;
5. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are underway, but all required remedial actions have not yet been taken;
6. Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented; and
7. Areas that are unevaluated or require additional evaluation.

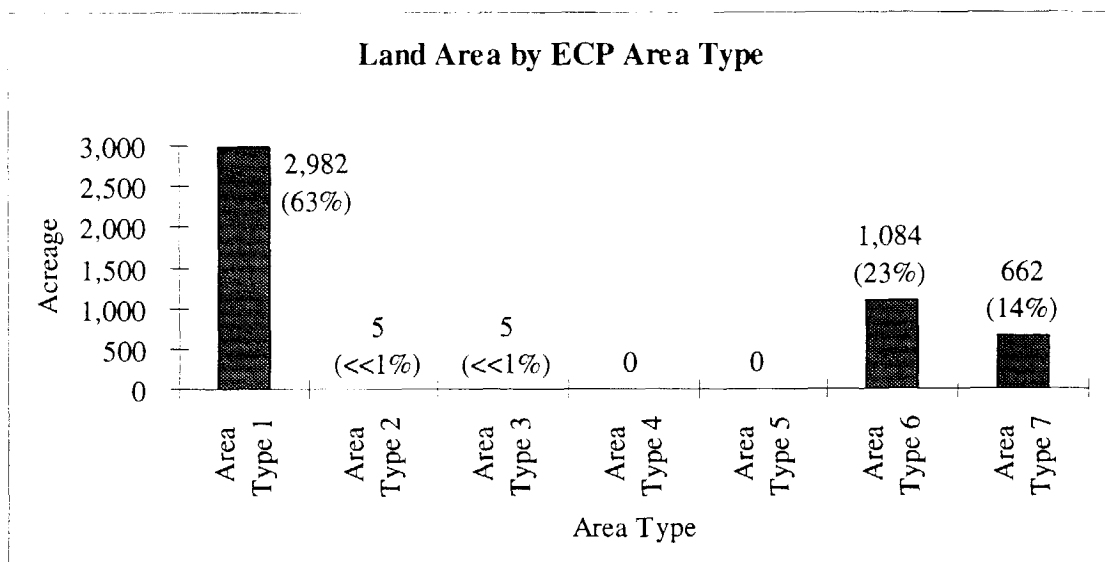
The current status of the environmental condition of property at MCAS El Toro has been evaluated for the BCP. Based on this evaluation, each LOC identified at the Station (Table 3-1a) has been assigned an area type. The area type boundaries are delineated in Figure 3-4 (Environmental Condition of Property). In this figure, each LOC is displayed with the buffer zone that was used in the final EBS. Each area type is assigned a unique pattern; a more limiting area type overwrites a less limiting area type when overlap of LOCs occurs. For example, area type 6 LOCs overwrite area type 3 LOCs. Exhibit 3-9 shows the breakdown of Station land by area type. This information is taken from the Final EBS and is summarized in Table 3-17 (Summary of Land Area by ECP Area Type). The following sections summarize the types of LOCs in each of the seven area types.

3.4.1 Area Type 1 (Areas Where No Storage, Release, or Disposal Has Occurred)

LOCs at the Station qualifying as area type 1 include the following:

- SWMUs/AOCs that were evaluated in the PR and VSI portions of the RFA, and were found to be areas where no storage, release, or disposal of hazardous materials occurred;

Exhibit 3-9



Source: Table 3-17

- PCB transformer locations where transformers are or were formerly operated, and no release is known to have occurred; and
- Station buildings (the presence of building materials such as ACMs, LBP, and/or PCBs [in light ballasts] will not affect the ability to transfer building “as is.” However, the DON will need to disclose the known presence of these materials in buildings to any potential purchaser of the property).

3.4.2 Area Type 2 (Areas Where Only Storage Has Occurred)

Area type 2 includes those LOCs where available information indicates that only storage of hazardous materials has occurred or is ongoing, and no release(s) are known to have occurred. LOCs identified at the Station as area type 2 include the following:

- less-than-90-day accumulation areas and RFA SWMUs/AOCs that have shown no evidence of release as determined by visual inspections and/or soil sampling results; and
- UST removal sites where soil sample analytical results are below detection limits.

3.4.3 Area Type 3 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but Require No Remedial Action)

Area type 3 includes those LOCs where available information indicates that a release has occurred, but that sampling results indicate that no remedial action is required. Area type 3 LOCs identified at the Station include:

- RFA SWMUs/AOCs that were included in the SV and, based on the soil sample results, were recommended for no further action; and
- UST removal sites where soil sample analytical results indicate that petroleum hydrocarbons were detected, but at concentrations below LUFT levels. Closure of these sites is pending agency approval.

3.4.4 Area Type 4 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, and All Remedial Actions Have Been Taken)

Currently, no area type 4 LOCs are known to exist on-Station.

3.4.5 Area Type 5 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred and Action is Underway, but Not Final)

Currently, no area type 5 areas are known to exist on-Station.

3.4.6 Area Type 6 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but Required Response Actions Have Not Been Taken)

Area type 6 sites are those areas where response actions have been identified but have not been implemented. LOCs identified on-Station as area type 6 include:

- IRP sites being evaluated in the ongoing RI/FS phase of the program (the response actions have not yet been implemented for any of the sites);
- UST removal sites with known soil contamination that have not yet been remediated;
- RFA SWMUs/AOCs recommended for response actions in the RFA (e.g., repair of cracks in pavement, excavation of shallow stained soil); and
- OWSs with RFA sampling results that indicate releases have likely occurred and will possibly require remediation (SWMUs/AOCs 173 and 175).

3.4.7 Area Type 7 (Unevaluated Areas or Areas Requiring Additional Evaluation)

This category encompasses areas at the Station that, based on available information, are unevaluated or require additional evaluations. LOCs where data gaps exist are included in this category. Area type 7 LOCs include the following:

- currently in-place USTs, OWSs, and ASTs at the Station, with the exception of those that were found to be contaminated (area type 6) based on RFA SV results (these LOCs will require some further investigation to determine if a release has occurred);
- RFA SWMUs/AOCs that were recommended for additional investigation (i.e., sampling) in the RFA and/or by DTSC;
- miscellaneous LOCs, including the following:
 - fuel supply pipelines,
 - silver recovery unit locations,

- former Desert Storm waste storage area near DRMO Storage Yard No. 3,
 - former water tower locations (possible mercury releases),
 - active and inactive lined burn pits,
 - current and former pesticide storage areas,
 - PCB transformer storage areas,
 - PCB equipment storage area, and
 - inactive former RCRA-permitted facility (Building 673-T3).
- less-than-90-day accumulation areas that were constructed after completion of the RFA, and have not been visually inspected or sampled;
 - aerial photograph features/anomalies recommended for further evaluation; and
 - locations of potential environmental concern identified in interviews with current and former Station personnel held on 26 May 1994.

3.4.8 Suitability of Installation Property for Transfer by Deed

Final determinations on the suitability of Station property for transfer have not yet been made. Identification of uncontaminated parcels under CERFA will be made after preparation of CERFA and EBS documents and concurrence by the agencies. In the draft version of the CERFA and EBS reports (Jacobs 1994a,b), 20 parcels (approximately 2,527 acres) were identified as uncontaminated under CERFA. (These parcels do not correspond to the reuse parcels identified in this BCP.) After discussion with the regulatory agencies, the Marines decided to drop the parcel designation and nominate area type 1 parcels as CERFA eligible. The U.S. EPA reviewed the final CERFA and EBS reports, dated April 1995, and concurred that 2,982 acres of MCAS El Toro is CERFA uncontaminated. Cal-EPA agreed with the U.S. EPA decision.

Based on the information presented in Section 3.4.7, none of the reuse parcels identified at MCAS El Toro appear to be currently suitable for transfer as a whole. Creation of subdivisions of parcels may be considered to expedite property transfer. Subdivisions may be based on CERFA parcels identified at the Station.

3.5 STATUS OF COMMUNITY INVOLVEMENT

Key components of the DON community relations activities associated with IRP and RCRA activities include RAB meetings, fact sheets, site tours, workshops, and press releases as required by regulations and as needed by the impacted community. The community relations program is designed to be flexible, and to address changing site conditions and community concerns. The DON has taken a proactive approach to community relations activities and intends to be open and responsive to the community during the IRP.

3.5.1 Community Relations Plan

As part of the IRP, a draft final updated Community Relations Plan was prepared and issued for MCAS El Toro in December 1995. The Community Relations Plan describes the approach the Marine Corps will use to address community concerns and issues. It also details outreach and participation activities designed to address community concerns and assure adequate and timely public participation in IRP activities. MCAS El Toro will modify its Community Relations Plan on an annual basis or as appropriate to address changes in cleanup activities and community concerns, and to remain consistent with regulatory guidelines.

3.5.2 Designated Contacts

The designated MCAS El Toro contacts are:

Joseph Joyce
BRAC Environmental Coordinator
MCAS El Toro
P.O. Box 95001
Santa Ana, CA 92709-5001
(714) 726-3470

Fraser Felter
Community Relations Coordinator
U.S. Environmental Protection Agency
75 Hawthorne Street (H-1-1)
San Francisco, CA 94105
(800) 231-3075

Marsha Mingay
Public Participation Specialist
California Environmental Protection Agency
245 West Broadway, Suite 350
Long Beach, CA 90802-4444
(310) 590-4881

3.5.3 Information Repositories

An information repository has been established at the Heritage Park Library in Irvine. This location contains documents related to the IRP process, including work plans, technical reports, and community relations materials (the Community Relations Plan, fact sheets, news releases, and RAB meeting minutes). A second repository has been established at the Station Library at MCAS El Toro. After the Station is closed, a second off-Station repository may be designated.

3.5.4 Administrative Record

The Administrative Record (AR) file has been maintained at the MCAS El Toro EO and is updated quarterly in accordance with CERCLA. It includes all records of public involvement and all information on which the decisions for IRP remedial

actions are based. Copies of these records are on file at the Heritage Park Library information repository.

3.5.5 Restoration Advisory Board

A Technical Review Committee (TRC) was formed in 1991 to provide a forum for public communications on proposed environmental issues. The TRC included representatives from MCAS El Toro, DON, RWQCB Santa Ana, DTSC, and the local community. In September 1993, DoD issued guidance to implement President Clinton's Five Point Plan for economic recovery, which resulted in conversion of MCAS El Toro TRC to a RAB.

The RAB, which uses the TRC membership as a nucleus, has been formed to provide input into the cleanup program at MCAS El Toro and the transfer of property to the local community for reuse. Membership to the RAB was sought through public notification in the *Orange County Register* and the Orange County edition of the *Los Angeles Times*. An introductory formation meeting was held on 13 January 1994. RAB members were initially selected from the responses to the notification and membership applications received. Final selection of RAB members was completed in April 1994. Ms. Marcia Rudolf, a community representative, is a cochair for the RAB, along with the MCAS El Toro BEC. A mission statement has been developed to provide a framework for the functions and administration of the RAB.

The RAB holds organizational, informational, and formal meetings. Subcommittees have been formed to review documents associated with categories of major environmental activities occurring at the Station. The subcommittees will provide comments on the documents associated with these activities as they become available for review. Subcommittees have a standard 30-day review period in which to provide recommendations and comments to the BCT. The RAB and its subcommittees do not, however, serve as formal advisory bodies. The RAB recently completed the review of seven EE/CAs for OU-3 sites. Currently, subcommittees are reviewing the updated Community Relations Plan, the Draft Interim FS for OU-1, and the addendum to the RFA reports. A subcommittee has been formed to review and provide comments on this revised BCP, as well.

All RAB meetings are open to the public and announced in the *Orange County Register* one week in advance. Technical presentations to assist RAB members in understanding complex environmental issues have been provided on an ongoing basis.

3.5.6 Mailing List

A mailing list of all interested parties in the community is maintained by the CLEAN II contractor. This list is updated once per quarter. It contains all RAB members, Station housing residents, regulatory agencies, and interested members of the general public.

3.5.7 Fact Sheets

Fact sheets are used to inform the public of the status of the IRP and of significant events associated with environmental cleanup at MCAS El Toro. These fact sheets are required by both state and federal regulations at key milestones of the cleanup process. Some of these milestones are listed below:

- establishment of the RAB,
- commencement of the RI/FS,
- announcement of a proposed plan,
- completion of a final remedial design (RD), and
- prior to the start of a planned removal action.

Fact sheets issued to date are as follows:

November 1991	Information Update/IRP Process
December 1992	Information Update
December 1993	Phase I RI Results
December 1993	RAB Formation
July 1995	Information Update/Tank 398
October 1995	Information Update/EE/CA Process
November 1995	MCAS El Toro Building 673-T3 Certification for Closure

These fact sheets are available at the information repositories.

3.5.8 Technical Assistance Grants

A Technical Assistance Grant (TAG) program has been established by U.S. EPA to assist citizens groups in understanding technical information that assesses potential hazards and the selection and design of appropriate response actions at Superfund sites. To date, no local community or environmental group in the MCAS El Toro area has requested or received such a grant.

3.5.9 Public Meetings

To date, the following public meetings on the environmental programs at MCAS El Toro have been held:

18 November 1991	Public Meeting
19 and 20 June 1992	Open House
13 January 1994	RAB Formation Meeting
28 April 1994	First RAB Meeting
2 June 1994	RAB Meeting
25 August 1994	RAB Meeting
12 October 1994	RAB Meeting

13 December 1994	RAB Meeting
31 January 1995	RAB Meeting
28 February 1995	RAB Meeting
30 March 1995	RAB Meeting
21 and 22 April 1995	Site Tours
27 April 1995	RAB Meeting
25 May 1995	RAB Meeting
27 July 1995	RAB Meeting
31 August 1995	RAB Meeting
28 September 1995	RAB Meeting
26 October 1995	RAB Meeting
30 November 1995	RAB Meeting
31 January 1996	RAB Meeting
23 and 24 February	Site Tours
28 February 1996	RAB Meeting

3.5.10 Federal Facility Agreement Process

In October 1990, the Navy, U.S. EPA, and Cal-EPA (DTSC and RWQCB Santa Ana) signed an FFA. This agreement established a schedule for each environmental study and defined the responsibilities of each party. This cooperative agreement is intended to help accelerate and streamline the IRP at MCAS El Toro. Based on preliminary agreements with U.S. EPA, DTSC, MCAS El Toro, and SWDIV, the FFA schedule will be updated using the BCP. (The IRP is the Navy equivalent to the U.S. EPA CERCLA process.)

3.5.11 Environmental Impact Statement Process

At this time, no EISs for base closure have been prepared for MCAS El Toro. An EIS will be developed as a component of property disposal and reuse. During development of an EIS, several public scoping meetings will be held. Public comments on the draft EIS document will be considered and addressed in the final versions of the EIS.

**Table 3-1a
Site Summary
(Sheet 1 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
1	IRP 1	2F	Explosive Ordnance Disposal Range	Excess ordnance including sulfur trioxide chlorosulfonic acid.	1952 to 1982	RI in progress	Unit 1: < 0.01	FFA		
2	IRP 2	5C	Magazine Road Landfill	Inert and municipal solid waste, unspecified industrial wastes, lead batteries, transformers, household refuse, hydraulic fluid, unspecified waste fuels, crankcase oil, lead-based paint residue, and scrap metal.	1950 to 1980	RI in progress	Unit 1: 0.22 Unit 2: < 0.01	FFA		
3	IRP 3	2A	Original Landfill	Municipal solid waste, scrap metal, incinerator ash, construction debris, paint residues, unspecified oily wastes, industrial solvents, hydraulic fluid, and engine coolants.	1943 to 1955	RI in progress	Unit 1: 1.01	FFA		Includes SWMUs/AOCs 10, 194, & 300
4	IRP 4	2A	Ferrocene Spill Area	Ferrocene spill material from engine test cell.	1983	RI and EE/CA in progress	Unit 1: 8.34			
5	IRP 5	3B	Perimeter Road Landfill	Municipal solid waste, unspecified fuels, solvents and cleaning fluids, scrap metals, paint residues, and unspecified oily wastes.	1955 to late 1960s	RI in progress	Unit 1: 0.27	FFA		
6	IRP 6	5A	Drop Tank Drainage Area No. 1	Rinsed aircraft drop tanks. Wastes included JP-5 and lubrication oils.	1969 to 1983	RI in progress	Unit 1: 0.06 Unit 2: 0.02 Unit 3: 1.03	FFA		Includes SWMU/AOC 236
7	IRP 7	5A	Drop Tank Drainage Area No. 2	JP-5 and lubrication oils in rinse water from aircraft drop tanks.	1969 to 1983	RI and EE/CA in progress	Unit 1: 51.75 Unit 2: < 0.01 Unit 3: 69.49 Unit 4: < 0.01 Unit 5: 10.30	FFA		
8	IRP 8	4B	DRMO Storage Yard	Release of PCB-containing transformer fluid.	Mid-1970s to present	RI and EE/CA in progress	Unit 1: 47.92 Unit 2: < 0.01 Unit 1,006.75 Unit 4: 81.40 Unit 5: < 0.01	FFA		Includes SWMUs/AOCs 71 & 72
9	IRP 9	5A	Crash Crew Pit No. 1	Burned leaded AVGAS, JP-5, and crankcase oil in unlined pits for fire training.	1965 to 1971	RI in progress	Unit 1: 0.30	FFA		Includes SWMUs/AOCs 104, 105, & 106
10	IRP 10	5A	Petroleum Disposal Area	Crankcase oil, antifreeze, hydraulic and transmission fluids, motor fuel and solvent.	1952 to present	RI in progress	Unit 1: 12.13 Unit 2: < 0.01	FFA		
11	IRP 11	4A	Transformer Storage Area	Stored PCB-containing transformers.	1968 to 1983	RI and EE/CA in progress	Unit 1: 124.7 Unit 2: 90.09	FFA		

Table 3-1a
Site Summary
(Sheet 2 of 27)

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
12	IRP 12	4B	Sludge Drying Beds	Wastewater sludges applied to land.	1943 to 1972	RI and EE/CA in progress	Unit 1: 31.42 Unit 2: 3.24 Unit 3: 86.24	FFA		
13	IRP 13	1A	Oil Change Area	Releases of crankcase oil.	1977 to 1983	RI and EE/CA in progress	Unit 1: 1.00 Unit 2: 6.67	FFA		Includes SWMU/AOC 90
14	IRP 14	1A	Battery Acid Disposal Area	Vehicle battery acid, lubrication oil, and paint residue.	1977 to 1983	RI and EE/CA in progress	Unit 1: 115.3 Unit 2: 18.72	FFA		
15	IRP 15	1D	Suspended Fuel Tanks	Diesel fuel leaked onto soil.	1972 to 1984	RI in progress	Unit 1: 0.02	FFA		
16	IRP 16	5A	Crash Crew Pit No. 2	Burned JP-5, AVGAS, hydraulic fluid, crankcase oil, white phosphorus, magnesium phosphate, and napalm in unlined pits for fire training.	1972 to 1985	RI in progress	Unit 1: < 0.01 Unit 2: 0.07 Unit 3: 0.01	FFA		
17	IRP 17	5C	Communications Station Landfill	Landfilled cooking grease, oils, fuels, and municipal debris.	1981 to 1983	RI in progress	Unit 1: 10.89 Unit 2: 0.31	FFA		
18	IRP 18	NA	VOC Contaminated Groundwater Emanating from Southwest Quadrant ²	VOC contaminants in groundwater from source in southwest quadrant of Station.		RI in progress		FFA		
19	IRP 19	5A	Aircraft Expeditionary Refueling (ACER) Site	Fuel storage area experienced minor fuel spills and leaks throughout operational history. A 15,000-gallon JP-5 spill occurred in 1986. Affected soil was excavated and replaced.	1964 to 1987	RI and EE/CA in progress	Unit 1: 43.56 Unit 2: 0.02 Unit 3: < 0.01	FFA		
20	IRP 20	1B	Hobby Shop	Kerosene formerly used to wash down pavement, collected in oil/water separators that discharged to nearby drainage ditches; stained soil from petroleum products.	1967 to present	RI and EE/CA in progress	Unit 1: < 0.01 Unit 2: 2.13 Unit 3: 18.83 Unit 4: 0.21	FFA		
21	IRP 21	4B	Materials Management Group, Bldg. 320	Outdoor drum storage area for chemical storage, including temporary storage of chemicals with expired labels.	1964 to 1986	RI in progress	Unit 1: 0.15	FFA		Includes SWMU/AOC 94
22	IRP 22	5A	Tactical Air Fuel Dispensing System (TAFDS)	Air fueling station with history of undocumented fuel spills and leaks; location of several fuel bladder revetments.	1980 to 1986	RI in progress	Unit 1: 10.61 Unit 2: 0.02	FFA		
23	IRP 24	4A, 4B, 5A	Possible VOC Source Area ⁴	Various activities in this area, including former metal plating operations, may have contributed to the regional VOC groundwater contamination.		RI in progress		FFA		

**Table 3-1a
Site Summary
(Sheet 3 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
24	IRP 25	NA	Major Drainages	Four drainage channels that flow through or adjacent to the Station and receive storm water discharges from the Station.		RI in progress	Agua Chinon soil: < 0.01 water: 0.06 Bee Canyon soil: 0.09 water: 1.6 Marshburn Ch. soil: 0.03 water: 0.47 Borrego Canyon water: 1.53	FFA		Includes SWMUs/AOCs 3, 4, 5, and 11
25	APHO 1	1A	Stain							See Table 3-1b
26	APHO 2	2A	Open storage, drum							See Table 3-1b
27	APHO 3	2A	Open storage, drum							See Table 3-1b
28	APHO 4	2A	Stain							See Table 3-1b
29	APHO 5	1D	Open storage							See Table 3-1b
30	APHO 6	4A	Impoundment							See Table 3-1b
31	APHO 7	4A	Wet soil, stain, open storage							See Table 3-1b
32	APHO 8	5A	Open storage, refuse, excavation, fill area							See Table 3-1b
33	APHO 9	5A	Liquid							See Table 3-1b
34	APHO 10	5A	Open storage							See Table 3-1b
35	APHO 11	4A	Trench, disturbed ground							See Table 3-1b
36	APHO 12	3A	Wet soil							See Table 3-1b
37	APHO 13	2B	Drum							See Table 3-1b
38	APHO 14	2B	Stain, wet soil							See Table 3-1b
39	APHO 15	5A	Stain							See Table 3-1b
40	APHO 16	1A	Wet soil, liquid							See Table 3-1b
41	APHO 17	4A	Stain							See Table 3-1b
42	APHO 18	4A	Stain							See Table 3-1b
43	APHO 19	4A	Stain, liquid							See Table 3-1b
44	APHO 20	3B	Excavation, liquid							See Table 3-1b
45	APHO 21	3A	Open storage, drum							See Table 3-1b
46	APHO 22	1A	Stain, Drum							See Table 3-1b
47	APHO 23	5A	Fuel bladder revetment, stain							See Table 3-1b
48	APHO 24	5A	Extraction							See Table 3-1b
49	APHO 25	2A	Mounded material, refuse							See Table 3-1b
50	APHO 26	2A	Excavation, liquid							See Table 3-1b
51	APHO 27	1A	Stain, wet soil							See Table 3-1b
52	APHO 28	2A	Liquid							See Table 3-1b
53	APHO 29	1A	Wet soil, liquid							See Table 3-1b
54	APHO 30	5B	Unidentified object							See Table 3-1b

**Table 3-1a
Site Summary
(Sheet 4 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
55	APHO 31	3B	Disturbed ground, mounded material dark-toned, unidentified object							See Table 3-1b
56	APHO 32	5A	Stain							See Table 3-1b
57	APHO 33	1D	Open storage							See Table 3-1b
58	APHO 34	1A	Stain, unidentified object, vertical tank							See Table 3-1b
59	APHO 35	2A	Open storage							See Table 3-1b
60	APHO 36	2A	Wet soil							See Table 3-1b
61	APHO 37	5A	Stain							See Table 3-1b
62	APHO 38	3A	Excavation							See Table 3-1b
63	APHO 39	5A	Wet soil, stain, horizontal tank							See Table 3-1b
64	APHO 40	1B	Drum							See Table 3-1b
65	APHO 41	1A	Stain, wet soil							See Table 3-1b
66	APHO 42	3A	Wet soil							See Table 3-1b
67	APHO 43	3B	Excavation							See Table 3-1b
68	APHO 44	5C	Disturbed ground, mounded material							See Table 3-1b
69	APHO 45	2B	Wet soil, stain, liquid, drum							See Table 3-1b
70	APHO 46	3B	Impoundment, fill area, excavation							See Table 3-1b
71	APHO 47	2B	Open storage, bldg., debris							See Table 3-1b
72	APHO 48	2B	Open storage, drum							See Table 3-1b
73	APHO 49	5A	Wet soil, liquid							See Table 3-1b
74	APHO 50	5A	Trench							See Table 3-1b
75	APHO 51	3B	Stain							See Table 3-1b
76	APHO 52	1A	Stain							See Table 3-1b
77	APHO 53	1A	Stain							See Table 3-1b
78	INT LF1	2C	Possible landfill area next to family housing							Identified in interviews
79	INT LF2	3B,3F	Possible landfill area south of IRP Site 5							Identified in interviews
80	MSC B1	5A	Active burn pit adjacent to IRP Site 16							
81	MSC B2	5A	Inactive burn pit adjacent to IRP Site 16							
82	MSC D1	3B	Desert Storm waste storage area near DRMO Yard #3							
83	MSC JP5	NA	JP-5 fuel supply pipelines							
84	MSC P1	3F	Past pesticide storage area at Bldg. 1687							
85	MSC P2	3F	Past pesticide storage area near Bldg. 464							
86	MSC W1	1G	Former elevated water reservoir (west tower)							Reported past mercury releases from level gauge
87	MSC W2	1G	Former elevated water reservoir (east tower)							Reported past mercury releases from level gauge
88	UST 1A	1C	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 5 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
89	UST 1B	1C	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
90	UST 6A	5A	1,000 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
91	UST 6B	5A	500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
92	UST 11	1A	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
93	UST 12	1A	500 gal. Diesel		Inst. 1943	Closed				See Table 3-7
94	UST 13	1A	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
95	UST 14	1A	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
96	UST 24	1A	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
97	UST 32	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
98	UST 33	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
99	UST 34	1D	500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
100	UST 35	1D	500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
101	UST 37	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
102	UST 38	1D	1,500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
103	UST 40	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
104	UST 41	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
105	UST 42	1D	500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
106	UST 43	1D	500 gal. Fuel oil		Inst. 1943	Closed				See Table 3-7
107	UST 44	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
108	UST 45	1D	500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
109	UST 46	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
110	UST 47A	1D	1,500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
111	UST 47C	1D	500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
112	UST 47B	1D	1,500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
113	UST 53	1D	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
114	UST 54A	1C	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
115	UST 54B	1C	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
116	UST 55A	NL	5,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
117	UST 55B	NL	5,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
118	UST 56A	1C	550 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
119	UST 56B	1C	1,400 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
120	UST 56C	1C	500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
121	UST 57	1C	15,000 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
122	UST 58	1C	5,300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
123	UST 59	1C	5,300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
124	UST 60	1C	2,000 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
125	UST 62	1C	500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
126	UST 63A	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
127	UST 63B	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
128	UST 65A	1C	1,400 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
129	UST 65B	1C	2,000 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
130	UST 66A	1B	1,100 gal. Diesel		Inst. 1943	Closed				See Table 3-7
131	UST 66B	1B	1,500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 6 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
132	UST 67A	1B	1,500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
133	UST 67B	1B	1,500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
134	UST 68	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
135	UST 69	1B	500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
136	UST 70	1B	500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
137	UST 71	1B	500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
138	UST 72	1B	500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
139	UST 73	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
140	UST 74	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
141	UST 75A	1B	500 gal. Diesel		Inst. 1943	Closed				See Table 3-7
142	UST 75B	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
143	UST 75C	1B	500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
144	UST 77	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
145	UST 78	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
146	UST 79	1B	500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
147	UST 80	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
148	UST 81	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
149	UST 82	1B	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
150	UST 83A	1B	1,500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
151	UST 83B	1B	1,500 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
152	UST 84A	1B	1,500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
153	UST 84B	1B	1,500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
154	UST 94	1B	1,500 gal. Fuel oil		Inst. 1943	Closed				See Table 3-7
155	UST 98A	1B	1,500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
156	UST 98B	1B	500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
157	UST 105A	2A	1,000 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
158	UST 105B	2A	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
159	UST 114A	5A	1,500 gal. Fuel oil		Inst. 1966	Removed				See Table 3-7
160	UST 114B	5A	560 gal. Diesel		Inst. 1966	Removed				See Table 3-7
161	UST 115A	5A	650 gal. Fuel oil		Inst. 1943	Removed				See Table 3-7
162	UST 115B	5A	560 gal. Fuel oil		Inst. 1966	Inactive per OCHCA				See Table 3-7
163	UST 116	5A	500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
164	UST 117	5A	500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
165	UST 126	2A	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
166	UST 130A	2A	1,500 gal. Diesel		Unknown	Inactive				See Table 3-7
167	UST 130B	2A	1,500 gal. Diesel		Unknown	Inactive				See Table 3-7
168	UST 133	2A	500 gal. Diesel		Inst. 1943	Removed				See Table 3-7
169	UST 138	2A	1,000 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
170	UST 146	1C	2,600 gal. Unknown contents		Unknown	Removed				See Table 3-7
171	UST 159	4B	200 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
172	UST 176	1A	25,000 gal. Av.Gas, wastewater		Inst. 1943	Removed				See Table 3-7
173	UST 177	1A	50,000 gal. Av.Gas, wastewater, fuel oil		Inst. 1943	Removed				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 7 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
174	UST 178	1A	50,000 gal. Av.Gas, wastewater, fuel oil		Inst. 1943	Removed				See Table 3-7; SWMU/AOC 48
175	UST 179	1A	25,000 gal. Av.Gas, wastewater, fuel oil		Inst. 1943	Removed				See Table 3-7; SWMU/AOC 49
176	UST 180	1A	25,000 gal. Av.Gas, wastewater		Inst. 1943	Removed				See Table 3-7; SWMU/AOC 51
177	UST 181	1A	50,000 gal. Av.Gas, wastewater, fuel oil		Inst. 1943	Removed				See Table 3-7
178	UST 182	1A	50,000 gal. Av.Gas, wastewater, fuel oil		Inst. 1943	Removed				See Table 3-7; SWMU/AOC 52
179	UST 183	1A	25,000 gal. Av.Gas, wastewater, fuel oil		Inst. 1943	Removed				See Table 3-7
180	UST 184	1D	25,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
181	UST 185	1D	50,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
182	UST 186	1D	25,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 275
183	UST 187	1D	50,000 gal. Aviation Gas JP-5		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 276
184	UST 188	1A	25,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 277
185	UST 189	1A	50,000 gal. Waste Oil		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 57
186	UST 190	1A	50,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 278
187	UST 191	1A	25,000 gal. Waste Oil		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 59
188	UST 192	1A	25,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
189	UST 193	1A	50,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 279
190	UST 194	1A	50,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
191	UST 195	1A	25,000 gal. Waste Fuel		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 280
192	UST 196	2A	25,000 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
193	UST 197	2A	50,000 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
194	UST 198	2A	50,000 gal. JP-5		Inst. 1943	Inactive				See Table 3-7
195	UST 199	2A	25,000 gal. JP-5		Inst. 1943	Inactive				See Table 3-7
196	UST 200	2A	25,000 gal. JP-5		Inst. 1943	Inactive				See Table 3-7
197	UST 201	2A	50,000 gal. JP-4		Inst. 1943	Inactive				See Table 3-7
198	UST 202	2A	50,000 gal. JP-4		Inst. 1943	Inactive				See Table 3-7
199	UST 203	2A	25,000 gal. JP-4		Inst. 1943	Inactive				See Table 3-7
200	UST 204	5A	50,000 gal. R JP-5		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 60
201	UST 205	5A	25,000 gal. R JP-5		Inst. 1943	Inactive				See Table 3-7; SWMU/AOC 61

**Table 3-1a
Site Summary
(Sheet 8 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
202	UST 206	5A	50,000 gal. Premium Gas		Inst. 1943	Active				See Table 3-7; SWMU/AOC 62
203	UST 207	5A	50,000 gal. Premium Gas		Inst. 1943	Active				See Table 3-7; SWMU/AOC 63
204	UST 208	2A	50,000 gal. Aviation Gas		Inst. 1943	Active				See Table 3-7
205	UST 209	2A	25,000 gal. Recycled Aviation Gas		Inst. 1943	Active				See Table 3-7
206	UST 210	2A	25,000 gal. Aviation Gas, JP-5		Inst. 1943	Inactive				See Table 3-7
207	UST 211	2A	50,000 gal. Aviation Gas		Inst. 1943	Active				See Table 3-7
208	UST 212	2A	50,000 gal. Aviation Gas, JP-5		Inst. 1943	Inactive				See Table 3-7
209	UST 213	2A	25,000 gal. Recycled Aviation Gas		Inst. 1943	Active				See Table 3-7
210	UST 214	2A	25,000 gal. Aviation Gas, JP-5		Inst. 1943	Inactive				See Table 3-7
211	UST 215	2A	50,000 gal. Aviation Gas		Inst. 1943	Active				See Table 3-7
212	UST 216	2A	50,000 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
213	UST 217	2A	25,000 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
214	UST 218	2A	25,000 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
215	UST 219	1B	50,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
216	UST 220	1B	25,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
217	UST 221	1B	25,000 gal. Unknown contents		Inst. 1943	Inactive				See Table 3-7
218	UST 224	1D	500 gal. Fuel Oil		Inst. 1943	Inactive				See Table 3-7
219	UST 240A	1A	8,000 gal. Aviation Gas		Inst. 1944	Removed				See Table 3-7
220	UST 240B	1A	185 gal. Waste Oil		Inst. 1982	Inactive				See Table 3-7; SWMU/AOC 65
221	UST 241	1A	850 gal. Diesel		Inst. 1945	Removed				See Table 3-7
222	UST 243	1A	1,500 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
223	UST 247	1D	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
224	UST 248	1D	1,500 gal. Fuel oil		Inst. 1945	Removed				See Table 3-7
225	UST 249	1D	1,500 gal. Fuel oil		Inst. 1945	Removed				See Table 3-7
226	UST 250	1D	1,500 gal. Fuel oil		Inst. 1945	Removed				See Table 3-7
227	UST 251	1D	2,000 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
228	UST 252	NL	1,400 gal. Diesel		Unknown	Inactive				See Table 3-7; SWMU/AOC 281; location unknown.
229	UST 253	1D	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
230	UST 254	1D	1,400 gal. Fuel oil		Inst. 1958	Inactive				See Table 3-7
231	UST 255	1D	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
232	UST 256	1C	2,000 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
233	UST 257	1C	1,400 gal. Fuel oil		Inst. 1944	Inactive				See Table 3-7
234	UST 258	1C	1,400 gal. Fuel oil		Inst. 1944	Inactive				See Table 3-7
235	UST 259	1C	2,600 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
236	UST 260	1C	2,600 gal. Fuel oil		Inst. 1945	Removed				See Table 3-7
237	UST 262A	1B	2,600 gal. Diesel		Inst. 1944	Removed				See Table 3-7
238	UST 262B	1B	2,600 gal. Diesel		Inst. 1944	Removed				See Table 3-7
239	UST 263	1B	3,400 gal. Diesel		Inst. 1945	Removed				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 9 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
240	UST 264	1B	3,400 gal. Diesel		Inst. 1945	Removed				See Table 3-7
241	UST 265	1B	1,400 gal. Diesel		Unknown	Inactive				See Table 3-7
242	UST 266	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
243	UST 267	1B	1,400 gal.		Inst. 1945	Inactive				See Table 3-7
244	UST 268	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
245	UST 269	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
246	UST 270	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
247	UST 271A	1B	1,500 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
248	UST 271B	1B	1,500 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
249	UST 271C	1B	650 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
250	UST 271D	1B	650 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
251	UST 272	1B	1,500 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
252	UST 273	1B	300 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
253	UST 274	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
254	UST 275	1B	1,500 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
255	UST 276	1B	1,500 gal. Fuel oil		Inst. 1945	Removed				See Table 3-7
256	UST 277	1B	1,500 gal. Fuel oil		Inst. 1945	Removed				See Table 3-7
257	UST 278A	1B	1,500 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
258	UST 278B	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
259	UST 279	1B	1,500 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
260	UST 280	1B	2,000 gal. Diesel		Inst. 1945	Removed				See Table 3-7
261	UST 281	1B	2,000 gal. Fuel oil		Inst. 1944	Inactive				See Table 3-7
262	UST 282	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
263	UST 283	1B	1,400 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
264	UST 284	1B	2,000 gal. Fuel oil		Inst. 1945	Inactive				See Table 3-7
265	UST 285	1B	2,000 gal. Fuel oil		Inst. 1944	Inactive				See Table 3-7
266	UST 288	5A	1,500 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
267	UST 292	2A	1,400 gal. Diesel		Inst. 1944	Inactive				See Table 3-7
268	UST 294	5A	1,500 gal. Fuel oil		Inst. 1944	Inactive				See Table 3-7
269	UST 295	5A	1,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7
270	UST 296	5A	6,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7
271	UST 297A	5A	6,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7
272	UST 297C	5A	185 gal. Waste Oil		Inst. 1982	Inactive				See Table 3-7; SWMU/AOC 77
273	UST 298A	4A	3,000 gal. Unleaded		Inst. 1944	Active				See Table 3-7
274	UST 298B	4A	2,000 gal. Diesel Fuel		Inst. 1944	Active				See Table 3-7
275	UST 298D	4A	185 gal. Waste oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 85
276	UST 304A	4A	1,500 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
277	UST 304B	4A	1,400 gal. Fuel oil		Inst. 1944	Removed				See Table 3-7
278	UST 306	4A	500 gal. Diesel		Inst. 1944	Removed				See Table 3-7
279	UST 314A	4A	50,000 gal. Diesel		Inst. 1945	Inactive				See Table 3-7; SWMU/AOC 91

**Table 3-1a
Site Summary
(Sheet 10 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
280	UST 314B	4A	50,000 gal. Diesel		Inst. 1945	Inactive				See Table 3-7; SWMU/AOC 92
281	UST 321	4B	1,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7
282	UST 322B	4B	530 gal. Diesel		Unknown	Closed				See Table 3-7; SWMU/AOC 282
283	UST 324A	4A	8,000 gal. JP-5		Inst. 1945	Inactive				See Table 3-7
284	UST 324B	4A	8,000 gal. JP-5		Inst. 1945	Inactive				See Table 3-7
285	UST 324C	4A	8,000 gal. JP-5		Inst. 1945	Inactive				See Table 3-7
286	UST 324D	4A	8,000 gal. JP-5		Inst. 1945	Inactive				See Table 3-7
287	UST 324E	4A	2,000 gal. Diesel		Inst. 1984	Inactive				See Table 3-7
288	UST 326A	4A	1,700 gal. JP-5		Inst. 1945	Inactive				See Table 3-7
289	UST 326B	4A	250 gal. JP-5		Inst. 1945	Inactive				See Table 3-7; SWMU/AOC 283
290	UST 327	1C	2,600 gal. Diesel		Inst. 1945	Removed				See Table 3-7
291	UST 328	1C	2,600 gal. Diesel		Inst. 1945	Removed				See Table 3-7
292	UST 329	1C	3,100 gal. Diesel		Inst. 1945	Removed				See Table 3-7
293	UST 335	4A	4,000 gal. Fuel oil		Inst. 1945	Removed				See Table 3-7
294	UST 337A	1B	2,600 gal. Fuel oil		Inst. 1946	Inactive				See Table 3-7
295	UST 337B	1B	2,600 gal. Fuel oil		Inst. 1946	Inactive				See Table 3-7
296	UST 347A	1B	5,000 gal. Gasoline		Inst. 1948	Removed				See Table 3-7
297	UST 347B	1B	7,500 gal. Gasoline		Inst. 1948	Removed				See Table 3-7
298	UST 347C	1B	10,000 gal. Gasoline		Inst. 1948	Removed				See Table 3-7
299	UST 347D	1B	300 gal. Waste oil		Inst. 1948	Removed				See Table 3-7; SWMU/AOC 284
300	UST 351	1D	500 gal. Fuel oil		Inst. 1944	Inactive				See Table 3-7
301	UST 359A	4B	1,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7; SWMU/AOC 303
302	UST 359C	4B	500 gal. Hazardous Waste		Inst. 1982	Removed				See Table 3-7; SWMU/AOC 102
303	UST 364A	1G	2,000 gal. Fuel oil		Inst. 1952	Removed				See Table 3-7
304	UST 364B	1G	5,300 gal. Fuel oil		Inst. 1952	Removed				See Table 3-7
305	UST 365	1G	2,500 gal. Diesel		Inst. 1954	Removed				See Table 3-7
306	UST 366	1G	2,500 gal. Diesel		Inst. 1954	Abandoned in place				See Table 3-7
307	UST 367	1G	2,500 gal. Diesel		Inst. 1954	Abandoned in place				See Table 3-7
308	UST 368	4A	2,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7
309	UST 369	4A	4,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7
310	UST 372A	5A	1,000 gal. Diesel		Inst. 1954	Active				See Table 3-7
311	UST 372B	5A	2,500 gal. Diesel		Inst. 1954	Closed				See Table 3-7
312	UST 374A	3A	42,000 gal. Diesel		Inst. 1954	Removed				See Table 3-7; SWMU/AOC 263
313	UST 374B	3A	10,000 gal. Diesel		Inst. 1954	Removed				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 11 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
314	UST 375	1D	10,000 gal. Fuel oil		Inst. 1954	Removed				See Table 3-7
315	UST 380A	2A	10,500 gal. Diesel		Inst. 1954	Removed				See Table 3-7
316	UST 380B	2A	600 gal. Motor Gas		Inst. 1954	Removed				See Table 3-7
317	UST 386A	4A	1,000 gal. Diesel		Inst. 1984	Inactive				See Table 3-7
318	UST 386C	4A	185 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 113
319	UST 388A	4A	500 gal. Diesel		Inst. 1955	Removed				See Table 3-7
320	UST 388B	4A	2,000 gal. Diesel		Inst. 1955	Active				See Table 3-7; SWMU/AOC 117
321	UST 390A	3A	550 gal. Diesel		Inst. 1955	Removed				See Table 3-7
322	UST 390B	3A	2,000 gal. Diesel		Inst. 1955	Removed				See Table 3-7
323	UST 392A	2A	2,000 gal. Unleaded		Inst. 1988	Active				See Table 3-7; SWMU/AOC 298
324	UST 392B	2A	2,000 gal. Diesel		Inst. 1955	Active				See Table 3-7
325	UST 392C	2A	Unknown capacity; contents: Diesel		Unknown	Inactive				See Table 3-7
326	UST 398	5A	108,000 gal. JP-5		Inst. 1956	Removed				Ongoing investigation and remediation
327	UST 399	5A	500 gal. Diesel		Inst. 1955	Inactive				See Table 3-7; SWMU/AOC 285
328	UST 404	5A	500 gal. Diesel		Inst. 1957	Active				See Table 3-7
329	UST 405	3A	1,200 gal. Diesel		Inst. 1956	Removed				See Table 3-7
330	UST 406	3A	1,200 gal. Diesel		Inst. 1956	Removed				See Table 3-7
331	UST 414A	5A	30,000 gal. JP-5		Inst. 1990	Inactive				See Table 3-7
332	UST 414B	5A	30,000 gal. JP-5		Inst. 1990	Inactive				See Table 3-7
333	UST 414C	5A	2,500 gal. JP-5		Inst. 1990	Active				See Table 3-7; SWMU/AOC 20
334	UST 435	5A	1,000 gal. Diesel		Inst. 1959	Removed				See Table 3-7
335	UST 439A	1G	5,000 gal. Fuel oil		Inst. 1959	Removed				See Table 3-7
336	UST 439B	1G	5,000 gal. Fuel oil		Inst. 1959	Removed				See Table 3-7
337	UST 442	3A	110 gal. Fuel oil		Inst. 1959	Removed				See Table 3-7
338	UST 443	1G	1,000 gal. Diesel		Inst. 1959	Closed				See Table 3-7
339	UST 445A	4A	10,000 gal. Unknown contents		Inst. 1959	Inactive				See Table 3-7
340	UST 445B	4A	10,000 gal. JP-5		Inst. 1959	Inactive				See Table 3-7
341	UST 445C	4A	100 gal. Waste oil		Inst. 1959	Inactive				See Table 3-7; SWMU/AOC 129
342	UST 447A	3A	10,000 gal. JP-5		Inst. 1959	Inactive				See Table 3-7
343	UST 447B	3A	10,000 gal. JP-5		Inst. 1959	Inactive				See Table 3-7
344	UST 449	1G	3,000 gal. Fuel oil		Inst. 1959	Closed				See Table 3-7
345	UST 450	1G	3,000 gal. Diesel		Inst. 1959	Removed				See Table 3-7
346	UST 451	1G	3,000 gal. Diesel		Inst. 1959	Removed				See Table 3-7
347	UST 452	1G	3,000 gal. Diesel		Inst. 1959	Removed				See Table 3-7
348	UST 453	3A	1,500 gal. Diesel		Inst. 1960	Inactive				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 12 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
349	UST 454	3A	1,500 gal. Diesel		Inst. 1960	Inactive				See Table 3-7
350	UST 455	3A	1,500 gal. Diesel		Inst. 1960	Removed				See Table 3-7
351	UST 457	3A	2,000 gal. Diesel		Inst. 1960	Removed				See Table 3-7
352	UST 461	5A	550 gal. Diesel		Inst. 1960	Removed				See Table 3-7; SWMU/AOC 137
353	UST 462	5A	550 gal. Diesel		Inst. 1960	Removed				See Table 3-7; SWMU/AOC 139
354	UST 463	3A	1,500 gal. Diesel		Inst. 1960	Removed				See Table 3-7; SWMU/AOC 249
355	UST 473A	NL	1,500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
356	UST 473B	NL	1,500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
357	UST 493	NL	1,500 gal. Diesel		Inst. 1944	Inactive				See Table 3-7; SWMU/AOC 143
358	UST 529	4A	25,000 gal. Waste Oil		Inst. 1944	Inactive				See Table 3-7; SWMU/AOC 145
359	UST 547	2D	567,000 gal. JP-5		Inst. 1953	Active				See Table 3-7
360	UST 548	2D	567,000 gal. JP-5		Inst. 1953	Active				See Table 3-7
361	UST 549	2D	567,000 gal. JP-5		Inst. 1953	Active				See Table 3-7
362	UST 550	2D	567,000 gal. JP-5		Inst. 1953	Active				See Table 3-7
363	UST 551	2D	567,000 gal. JP-5		Inst. 1953	Active				See Table 3-7
364	UST 553	2D	10,000 gal. Gasoline		Inst. 1956	Removed				See Table 3-7
365	UST 554	2D	10,000 gal. Kerosene		Inst. 1956	Removed				See Table 3-7
366	UST 568	5C	500 gal. Diesel		Inst. 1956	Active				See Table 3-7
367	UST 574	5A	25,000 gal. JP-5		Inst. 1955	Removed				See Table 3-7
368	UST 575	5A	25,000 gal. JP-5		Inst. 1955	Removed				See Table 3-7
369	UST 576	5A	25,000 gal. JP-5		Inst. 1955	Removed				See Table 3-7
370	UST 577	5A	25,000 gal. JP-5		Inst. 1955	Removed				See Table 3-7
371	UST 579	3F	320 gal. Unknown contents		Inst. 1957	Removed				See Table 3-7
372	UST 581	2B	550 gal. Diesel		Inst. 1945	Removed				See Table 3-7
373	UST 605A	5A	1,700 gal. Diesel		Inst. 1965	Removed				See Table 3-7
374	UST 605B	5A	500 gal. Diesel		Inst. 1965	Removed				See Table 3-7
375	UST 606A	5A	1,700 gal. Diesel		Inst. 1965	Removed				See Table 3-7
376	UST 606B	5A	500 gal. Diesel		Inst. 1965	Inactive				See Table 3-7
377	UST 610A	2A	300 gal. Gasoline		Inst. 1966	Removed				See Table 3-7
378	UST 625	1B	1,500 gal. Waste Oil		Inst. 1967	Inactive				See Table 3-7; SWMU/AOC 156
379	UST 627	3F	Unknown capacity; contents: Diesel		Unknown	Inactive				See Table 3-7
380	UST 634	2A	10,000 gal. Fuel oil		Inst. 1969	Removed				See Table 3-7
381	UST 636	3A	1,500 gal. Diesel		Inst. 1969	Inactive				See Table 3-7
382	UST 637-1	2A	12,000 gal. Unleaded		Inst. 1969	Active				See Table 3-7
383	UST 637-2	2A	12,000 gal. Unleaded		Inst. 1969	Active				See Table 3-7
384	UST 637-3	2A	12,000 gal. Unleaded		Inst. 1969	Active				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 13 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
385	UST 643A	5A	185 gal. Waste oil		Inst. 1982	Inactive				See Table 3-7; SWMU/AOC 162
386	UST 651-1	1G	12,000 gal. Unleaded		Inst. 1971	Active				See Table 3-7
387	UST 651-2	1G	12,000 gal. Unleaded		Inst. 1971	Active				See Table 3-7
388	UST 651-3	1G	12,000 gal. Unleaded		Inst. 1971	Active				See Table 3-7
389	UST 651-4	1G	12,000 gal. Unleaded		Inst. 1971	Active				See Table 3-7
390	UST 651-5	1G	500 gal. Waste oil		Inst. 1971	Active				See Table 3-7; SWMU/AOC 166
391	UST 651-6	1G	500 gal. New motor oil (bulk)		Inst. 1971	Active				See Table 3-7; SWMU/AOC 167
392	UST 651-7	1G	500 gal. New motor oil (bulk)		Inst. 1971	Active				See Table 3-7; SWMU/AOC 168
393	UST 655	4A	2,000 gal. Diesel		Inst. 1984	Removed				See Table 3-7; SWMU/AOC 250
394	UST 658A	2A	10,000 gal. JP-5		Inst. 1972	Active				See Table 3-7
395	UST 658B	2A	10,000 gal. JP-5		Inst. 1972	Active				See Table 3-7
396	UST 662	1G	10,000 gal. Fuel oil		Inst. 1973	Removed				See Table 3-7
397	UST 672	4A	500 gal. Waste JP-5		Inst. 1972	Inactive				See Table 3-7; SWMU/AOC 174
398	UST 672B	4A	1,000 gal. Waste Oil		Inst. 1972	Inactive				See Table 3-7; SWMU/AOC 176
399	UST 673B	3A	300 gal. Waste oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 180
400	UST 674A	4B	500 gal. Waste oil		Inst. 1982	Inactive				See Table 3-7; SWMU/AOC 187
401	UST 674B	4B	14 gal. Waste oil		Inst. 1995	Active				See Table 3-7
402	UST 675A	4B	500 gal. Waste oil		Inst. 1982	Inactive				See Table 3-7; SWMU/AOC 188
403	UST 675B	4B	14 gal. Waste oil		Inst. 1995	Active				See Table 3-7
404	UST 693A	1G	500 gal. Diesel		Inst. 1975	Removed				See Table 3-7
405	UST 693B	1G	500 gal. Diesel		Inst. 1975	Removed				See Table 3-7
406	UST 706	NL	100 gal. Diesel		Inst. 1984	Removed				See Table 3-7; SWMU/AOC 191
407	UST 716A	5A	3,000 gal. Waste oil		Inst. 1976	Active				See Table 3-7; SWMU/AOC 192
408	UST 718	1B	4,000 gal. Fuel oil		Inst. 1978	Removed				See Table 3-7
409	UST 724A	NL	1,000 gal. Diesel		Unknown	Active				See Table 3-7
410	UST 730	1A	1,000 gal. Diesel		Inst. 1978	Active				See Table 3-7
411	UST 733A	1G	10,000 gal. Diesel		Inst. 1980	Removed				See Table 3-7
412	UST 733B	1G	10,000 gal. Diesel		Inst. 1980	Removed				See Table 3-7; SWMU/AOC 286
413	UST 733C	1G	10,000 gal. Diesel		Inst. 1980	Removed				See Table 3-7; SWMU/AOC 287

**Table 3-1a
Site Summary
(Sheet 14 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
414	UST 733D		10,000 gal. Diesel		Inst. 1980	Inactive				See Table 3-7
415	UST 758B	4A	185 gal.		Inst. 1982	Active				See Table 3-7; SWMU/AOC 197
416	UST 759B	4A	185 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 200
417	UST 760A	4A	185 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 202
418	UST 761B	5A	500 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 206
419	UST 762B	3A	185 gal. Waste Oil		Inst. 1982	Inactive				See Table 3-7; SWMU/AOC 209
420	UST 763B	5A	500 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 212
421	UST 764A	2A	500 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 214
422	UST 765A	1A	185 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 217
423	UST 766B	1A	500 gal. Waste Oil		Inst. 1982	Active				See Table 3-7; SWMU/AOC 221
424	UST 782	3F	1,000 gal. Gasoline		Unknown	Inactive				See Table 3-7
425	UST 797	1A	10,000 gal. Aviation Gas		Inst. 1985	Active				See Table 3-7
426	UST 800A	4B	10,000 gal. Diesel Fuel		Inst. 1984	Active				See Table 3-7
427	UST 800B	4B	10,000 gal. Kerosene		Inst. 1984	Inactive				See Table 3-7
428	UST 800C	4B	10,000 gal. Diesel Fuel		Inst. 1984	Inactive				See Table 3-7
429	UST 800D	4B	1,000 gal. Waste Oil		Inst. 1984	Inactive				See Table 3-7; SWMU/AOC 230
430	UST 800E	4B	1,000 gal. Waste Oil		Inst. 1984	Inactive				See Table 3-7; SWMU/AOC 231
431	UST 850A	5A	5,000 gal. JP-5		Inst. 1988	Active				See Table 3-7; SWMU/AOC 288
432	UST 850B	5A	5,000 gal. JP-5		Inst. 1988	Active				See Table 3-7; SWMU/AOC 289
433	UST 850C	5A	500 gal. Water		Inst. 1988	Active				See Table 3-7; SWMU/AOC 290
434	UST 891A	5A	30,000 gal. JP-5		Inst. 1990	Active				See Table 3-7
435	UST 891B	5A	30,000 gal. JP-5		Inst. 1990	Active				See Table 3-7
436	UST 891C	5A	2,500 gal. JP-5		Inst. 1990	Active				See Table 3-7
437	UST 902A	5A	50,000 gal. JP-5		Inst. 1993	Active				See Table 3-7
438	UST 902B	5A	50,000 gal. JP-5		Inst. 1993	Active				See Table 3-7
439	UST 902C	5A	2,500 gal. JP-5		Inst. 1993	Active				See Table 3-7
440	UST 5101	1D	500 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
441	UST 5102	1D	500 gal. Fuel oil		Inst. 1943	Inactive				See Table 3-7
442	UST 5201	2B	300 gal. Fuel oil		Inst. 1943	Closed				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 15 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
443	UST 5202	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
444	UST 5203	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
445	UST 5204	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
446	UST 5205	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
447	UST 5206	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
448	UST 5207	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
449	UST 5208	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
450	UST 5209	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
451	UST 5210	2B	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
452	UST 5211	2B	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
453	UST 5212	2C	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
454	UST 5213	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
455	UST 5214	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
456	UST 5215	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
457	UST 5216	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
458	UST 5217	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
459	UST 5218	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
460	UST 5219	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
461	UST 5220	2C	300 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
462	UST 5221	2C	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
463	UST 5222	2B	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
464	UST 5223	2B	300 gal. Diesel		Inst. 1943	Inactive				See Table 3-7
465	UST 5224	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
466	UST 5225	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
467	UST 5226	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
468	UST 5227	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
469	UST 5228	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
470	UST 5229	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
471	UST 5230	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
472	UST 5231	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
473	UST 5232	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
474	UST 5233	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
475	UST 5234	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
476	UST 5235	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
477	UST 5236	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
478	UST 5237	2B	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
479	UST 5238	2C	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
480	UST 5239	2C	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
481	UST 5240	2C	300 gal. Diesel		Inst. 1943	Removed				See Table 3-7
482	UST 5241	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
483	UST 5242	2B	300 gal. Diesel		Inst. 1943	Closed				See Table 3-7
484	UST 5243	NL	300 gal. Diesel		Inst. 1943	Inactive				See Table 3-7

**Table 3-1a
Site Summary
(Sheet 16 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
485	UST T-1	2D	2,000 gal. Waste JP-5		Inst. 1988	Active				See Table 3-7; SWMU/AOC 23
486	UST T-2	5A	2,000 gal. Waste JP-5		Inst. 1988	Inactive				See Table 3-7; SWMU/AOC 18
487	UST T-3	2A	2,000 gal. Waste JP-5		Inst. 1988	Inactive				See Table 3-7; SWMU/AOC 19
488	UST T-4	1A	2,000 gal. Waste Oil		Inst. 1988	Active				See Table 3-7; SWMU/AOC 58
489	UST T-4C	1A	2,000 gal. Waste JP-5		Inst. 1988	Inactive				See Table 3-7
490	UST T-5	1A	2,000 gal. Waste JP-5		Inst. 1988	Removed				See Table 3-7; SWMU/AOC 17
491	UST T-6	2A	2,000 gal. Aviation Gas		Inst. 1988	Active				See Table 3-7; SWMU/AOC 21
492	UST T-7	5A	2,000 gal. Waste JP-5		Inst. 1988	Inactive				See Table 3-7; SWMU/AOC 24
493	UST T-8	2A	2,000 gal. Waste JP-5		Inst. 1988	Active				See Table 3-7; SWMU/AOC 22
494	UST T-9	5A	2,000 gal. JP-5		Inst. 1988	Active				See Table 3-7; SWMU/AOC 228
495	UST T-10	5A	1,000 gal. JP-5		Inst. 1988	Inactive				See Table 3-7; SWMU/AOC 108
496	UST T-11	5A	1,000 gal. JP-5		Inst. 1988	Active				See Table 3-7; SWMU/AOC 75
497	AST 126	2A	300 gal. 10:10 Oil			Active				See Table 3-8
498	AST 155	5A	200 gal. Lube Oil			Active				See Table 3-8
499	AST 245	1A	1,000 gal. LPG			Active				See Table 3-8
500	AST 317	4B	275 gal. Fuel Oil			Inactive				See Table 3-8
502	AST 318	4B	275 gal. Fuel Oil			Inactive				See Table 3-8
503	AST 319	4B	275 gal. Fuel Oil			Inactive				See Table 3-8
504	AST 390A	3A	500 gal. Unleaded			Active				See Table 3-8
505	AST 390B	3A	500 gal. Diesel			Active				See Table 3-8
506	AST 610B	2A	300 gal. Diesel Fuel Oil			Active				See Table 3-8
507	AST 619	3F	Unknown, Diesel			Active				See Table 3-8
508	AST 626	1B	1,000 gal. Waste Oil			Inactive				See Table 3-8
509	AST 637	2A	500 gal. Propane			Active				See Table 3-8
510	AST 651	1G	1,000 gal. Propane			Active				See Table 3-8
511	AST 670	1G	Unknown, LPG			Active				See Table 3-8
512	AST 717	5A	500 gal. Diesel			Active				See Table 3-8
513	AST 753	4A	200 gal. Pesticides			Active				See Table 3-8
514	AST 797	5A	1,000 gal. Waste Oil			Active				See Table 3-8
515	AST 862	4B	30,000 gal. JP 5			Active				See Table 3-8

**Table 3-1a
Site Summary
(Sheet 17 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
516	OWS 96	4A	OWS 96	Oil/water	Unknown	Unknown				See Table 3-14; SWMU/AOC 291
517	OWS 240C	1A	OWS 240C	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 66
518	OWS 244	5A	OWS 244	Oil/water	Inst. 1944	Active				See Table 3-14; SWMU/AOC 68
519	OWS 280A	1B	OWS 280A	Oil/water	Unknown	Active				See Table 3-14
520	OWS 297B	5A	OWS 297B	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 76
521	OWS 298C	4A	OWS 298C	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 84
522	OWS 314C	4A	OWS 314C	Oil/water	Unknown	Inactive				See Table 3-14
523	OWS 324-1	4A	OWS 324-1	Oil/water	Unknown	Inactive				See Table 3-14
524	OWS 324-2	4A	OWS 324-2	Oil/water	Unknown	Inactive				See Table 3-14
525	OWS 357	4A	OWS 357	Oil/water	Unknown	Unknown				See Table 3-14; SWMU/AOC 296
526	OWS 359B	4B	OWS 359B	Oil/water	Inst. 1952	Active				See Table 3-14; SWMU/AOC 101
527	OWS 371	3A	OWS 371	Oil/water	Unknown	Active				See Table 3-14
528	OWS 386B	4A	OWS 386B	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 112
529	OWS 388C	4A	OWS 388C	Oil/water	Inst. 1955	Active				See Table 3-14; SWMU/AOC 118
530	OWS 445	4A	OWS 445	Oil/water	Unknown	Inactive				See Table 3-14
531	OWS 447C	5A	OWS 447C	Oil/water	Inst. 1959	Active				See Table 3-14; SWMU/AOC 132
532	OWS 461A	5A	OWS 461A	Oil/water	Unknown	Active				See Table 3-14
533	OWS 462A	5A	OWS 462	Oil/water	Unknown	Active				See Table 3-14
534	OWS 602	2A	OWS 602	Oil/water	Inst. 1964	Inactive				See Table 3-14; SWMU/AOC 148
535	OWS 605C	5A	OWS 605C	Oil/water	Inst. 1984	Active				See Table 3-14; SWMU/AOC 151
536	OWS 606C	5A	OWS 606C	Oil/water	Inst. 1965	Active				See Table 3-14; SWMU/AOC 154
537	OWS 626-1	1B	OWS 626-1	Oil/water	Inst. 1967	Active				See Table 3-14; SWMU/AOC 159
538	OWS 626-2	1B	OWS 626-2	Oil/water	Unknown	Active				See Table 3-14
539	OWS 626-3	1B	OWS 626-3	Oil/water	Unknown	Active				See Table 3-14
540	OWS 626-4	1B	OWS 626-4	Oil/water	Unknown	Active				See Table 3-14
541	OWS 643B	5A	OWS 643B	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 163
542	OWS 651-8	1G	OWS 651-8	Oil/water	Inst. 1971	Active				See Table 3-14; SWMU/AOC 169

**Table 3-1a
Site Summary
(Sheet 18 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
543	OWS 658C	2A	OWS 658C	Oil/water	Inst. 1972	Active				See Table 3-14
544	OWS 658D	2A	OWS 658D	Oil/water	Inst. 1995	Active				See Table 3-14
545	OWS 671	4A	OWS 671	Oil/water	Unknown	Active				See Table 3-14; SWMU/AOC 173
546	OWS 672A	4A	OWS 672A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 175
547	OWS 673A	3A	OWS 673A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 179
548	OWS 674	4B	OWS 674	Oil/water	Unknown	Active				See Table 3-14; SWMU/AOC 189
549	OWS 674B	4B	OWS 674B	Oil/water	Inst. 1995	Active				See Table 3-14;
550	OWS 675B	4B	OWS 675B	Oil/water	Unknown	Active				See Table 3-14; SWMU/AOC 292
551	OWS 675C	4B	OWS 675C	Oil/water	Inst. 1995	Active				See Table 3-14;
552	OWS 676	2B	OWS 676	Oil/water	Unknown	Unknown				See Table 3-14; SWMU/AOC 189
553	OWS 696	5A	OWS 696	Oil/water	Unknown	Unknown				See Table 3-14; SWMU/AOC 163
554	OWS 716B	5A	OWS 716B	Oil/water	Inst. 1976	Active				See Table 3-14; SWMU/AOC 193
555	OWS 744	1G	OWS 744	Oil/water	Unknown	Active				See Table 3-14
556	OWS 758A	4A	OWS 758A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 196
557	OWS 759A	4A	OWS 759A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 199
558	OWS 760B	4A	OWS 760B	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 203
559	OWS 761A	5A	OWS 761A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 205
560	OWS 762A	3A	OWS 762A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 208
561	OWS 763A	5A	OWS 763A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 211
562	OWS 764B	2A	OWS 764B	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 215
563	OWS 765B	1A	OWS 765B	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 218
564	OWS 766A	1A	OWS 766A	Oil/water	Inst. 1982	Active				See Table 3-14; SWMU/AOC 220
565	OWS 800F	4B	OWS 800F	Oil/water	Inst. 1984	Active				See Table 3-14; SWMU/AOC 232
566	OWS 802	4B	OWS 802	Oil/water	Unknown	Active				See Table 3-14

**Table 3-1a
Site Summary
(Sheet 19 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
567	OWS 817	3F	OWS 817	Oil/water	Unknown	Active				See Table 3-14; SWMU/AOC 233
568	OWS 845	5A	OWS 845	Oil/water	Unknown	Inactive				See Table 3-14; SWMU/AOC 248
569	OWS 850	5A	OWS 850	Oil/water	Unknown	Active				See Table 3-14
570	OWS 892	5A	OWS 892	Oil/water	Unknown	Active				See Table 3-14
571	OWS 896	5A	OWS 896	Oil/water	Inst. 1982	Active				See Table 3-14
572	OWS 897	5A	OWS 897	Oil/water	Unknown	Active				See Table 3-14
573	OWS 1702	1B	OWS 1702	Oil/water	Unknown	Active				See Table 3-14
574	PCB T1	5A	Transformer - F503496-65P, Pad 1311-Bldg. 6			Active			X	See Table 3-10
575	PCB T2	1A	Transformer-5KL505, Bldg. 12			Replaced			X	See Table 3-10
576	PCB T3	1A	Transformer-1350660, Pole 507B-Bldg. 19			Unknown			X	See Table 3-10
577	PCB T4	1D	Transformer- Pole 599-Bldg. 35			Removed			X	See Table 3-10
578	PCB T5	1C	Transformer-23971, Pole 157-Bldg. 58			Unknown			X	See Table 3-10
579	PCB T6	1C	Transformer-6954405, Pad 142-Bldg. 59			Replaced			X	See Table 3-10
580	PCB T7	1C	Transformer-6954539, Pad 142-Bldg. 59			Replaced			X	See Table 3-10
581	PCB T8	1C	Transformer-6956179, Pad 142-Bldg. 59			Replaced			X	See Table 3-10
582	PCB T9	1C	Transformer-7092522, Pole 80-Bldg. 60			Unknown			X	See Table 3-10
583	PCB T10	1C	Transformer-645B17826, Pole 654-Bldg. 65			Removed			X	See Table 3-10
584	PCB T11	1C	Transformer-645B17827, Pole 654-Bldg. 65			Removed			X	See Table 3-10
585	PCB T12	1C	Transformer-645B17855, Pole 654-Bldg. 65			Removed			X	See Table 3-10
586	PCB T13	2A	Transformer-7093890, Pole 904-Bldg. 105			Removed			X	See Table 3-10
587	PCB T14	5A	Transformer-177072, Pad 412-Bldg. 114			Replaced			X	See Table 3-10
588	PCB T15	5A	Transformer-177071, Pad 4112-Bldg. 115			Replaced			X	See Table 3-10
589	PCB T16	2A	Transformer-681549, Pole 812-Bldg. 118			Unknown			X	See Table 3-10
590	PCB T17	2A	Transformer-7093966, Pole 823A-Bldg. 120			Unknown			X	See Table 3-10
591	PCB T18	2A	Transformer-7092506P, Pole 823A-Bldg. 120			Unknown			X	See Table 3-10
592	PCB T19	2A	Transformer-7093966P, Pole 823A-Bldg. 120			Unknown			X	See Table 3-10
593	PCB T20	2A	Transformer-53233, Pad 4111-Bldg. 125			Replaced			X	See Table 3-10
594	PCB T21	2A	Transformer-6160963, Pad 4111-Bldg. 125			Replaced			X	See Table 3-10
595	PCB T22	2A	Transformer-7092697, Pole 871-Bldg. 129			Unknown			X	See Table 3-10
596	PCB T23	2A	Transformer-7092974, Pole 871-Bldg. 129			Unknown			X	See Table 3-10
597	PCB T24	2A	Transformer-7093975, Pole 871-Bldg. 129			Unknown			X	See Table 3-10
598	PCB T25	3A	Transformer-14346-1, NA-Bldg. 165			Replaced			X	See Table 3-10
599	PCB T26	2A	Transformer-5638241, Pole 802-Bldg. 203			Unknown			X	See Table 3-10
600	PCB T27	2A	Transformer-6455115, Pole 802-Bldg. 203			Unknown			X	See Table 3-10
601	PCB T28	1D	Transformer-6687930, NA-Bldg. 248			Removed			X	See Table 3-10
602	PCB T29	1D	Transformer-66F2983-Bldg. 248			Removed			X	See Table 3-10
603	PCB T30	1D	Transformer-66F3028-Bldg. 248			Removed			X	See Table 3-10
604	PCB T31	1D	Transformer-66K117-Bldg. 248			Removed			X	See Table 3-10
605	PCB T32	1D	Transformer-66K154-Bldg. 248			Removed			X	See Table 3-10
606	PCB T33	1F	Transformer-NA-Bldg. 248			Removed			X	See Table 3-10
607	PCB T34	1B	Transformer-9750379, Pad 143-Bldg. 264			Replaced			X	See Table 3-10

**Table 3-1a
Site Summary
(Sheet 20 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
608	PCB T35	1B	Transformer-9750997, Pad 143-Bldg. 264			Replaced			X	See Table 3-10
609	PCB T36	1B	Transformer-3700258, Pad 138-Bldg. 272			Replaced			X	See Table 3-10
610	PCB T37	1B	Transformer-6962781, Pad 138-Bldg. 272			Replaced			X	See Table 3-10
611	PCB T38	1B	Transformer-7093990, Pad 138-Bldg. 272			Replaced			X	See Table 3-10
612	PCB T39	1B	Transformer-7093256, Pad 128-Bldg. 281			Removed			X	See Table 3-10
613	PCB T40	1B	Transformer-7093261, Pad 128-Bldg. 281			Removed			X	See Table 3-10
614	PCB T41	1B	Transformer-7220136, Pad 128-Bldg. 281			Removed			X	See Table 3-10
615	PCB T42	1B	Transformer-6224013, Pad 141-Bldg. 285			Replaced			X	See Table 3-10
616	PCB T43	1B	Transformer-7093682, Pad 141-Bldg. 285			Replaced			X	See Table 3-10
617	PCB T44	1B	Transformer-7220241, Pad 141-Bldg. 285			Replaced			X	See Table 3-10
618	PCB T45	4A	Transformer-B58240, Pad 263-Bldg. 311			Replaced			X	See Table 3-10
619	PCB T46	1C	Transformer-72535, Pole 73-Bldg. 327			Removed			X	See Table 3-10
620	PCB T47	1C	Transformer-6587555, Pole 74-Bldg. 327			Unknown			X	See Table 3-10
621	PCB T48	1C	Transformer-65875666, Pole 74-Bldg. 327			Unknown			X	See Table 3-10
622	PCB T49	4A	Transformer-1888163, Pad 254-Bldg. 335			Replaced			X	See Table 3-10
623	PCB T50	4B	Transformer-B335346, Pad 264-Bldg. 359			Replaced			X	See Table 3-10
624	PCB T51	4B	Transformer-B335627, Pad 269-Bldg. 360			Replaced			X	See Table 3-10
625	PCB T52	1G	Transformer-62194, Pad 162-Bldg. 365			Removed			X	See Table 3-10
626	PCB T53	4A	Transformer-62220, Pad 259-Bldg. 368			Removed			X	See Table 3-10
627	PCB T54	4A	Transformer-62221, Pad 2510-Bldg. 369			Replaced			X	See Table 3-10
628	PCB T55	4A	Transformer-62222, Pad 2511-Bldg. 370			Replaced			X	See Table 3-10
629	PCB T56	5A	Transformer-10097-1, Pad 335-Bldg. 371			Active				See Table 3-10; Leak requires evaluation
630	PCB T57	5A	Transformer-10098-1, Pad 335-Bldg. 371			Active			X	See Table 3-10
631	PCB T58	5A	Transformer-14538, Pad 425-Bldg. 372			Replaced			X	See Table 3-10
632	PCB T59	3A	Transformer-14440, Pad 321-Bldg. 374			Replaced			X	See Table 3-10
633	PCB T60	5A	Transformer-06577-1-Bldg. 378			Replaced			X	See Table 3-10
634	PCB T61	4A	Transformer-B684198, Pad SS-2-Bldg. 383			Replaced			X	See Table 3-10
635	PCB T62	4A	Transformer-4418, Pad 257-Bldg. 386			Replaced			X	See Table 3-10
636	PCB T63	3A	Transformer-9908129, Pad 316-Bldg. 406			Replaced			X	See Table 3-10
637	PCB T64	1F	Transformer-NA, Pole 248-Bldg. 410			Removed			X	See Table 3-10
638	PCB T65	1F	Transformer- Pole 248-Bldg. 410			Removed			X	See Table 3-10
639	PCB T66	2B	Transformer-C379541, Pad 404-Bldg. 415			Replaced			X	See Table 3-10
640	PCB T67	1G	Transformer-C-861785, Pad 111-Bldg. 439			Removed			X	See Table 3-10
641	PCB T68	4A	Transformer-C861997A, Pad 256-Bldg. 445			Replaced			X	See Table 3-10
642	PCB T69	3A	Transformer-C861997B, Pad 331-Bldg. 447			Replaced			X	See Table 3-10
643	PCB T70	1G	Transformer-7371282, Pad 165-Bldg. 449			Removed			X	See Table 3-10
644	PCB T71	1G	Transformer-7371279, Pad 166-Bldg. 450			Removed			X	See Table 3-10
645	PCB T72	1G	Transformer-7371281, Pad 167-Bldg. 451			Removed			X	See Table 3-10
646	PCB T73	1G	Transformer-7371280, Pad 168-Bldg. 452			Removed			X	See Table 3-10
647	PCB T74	3A	Transformer-C-862139, Pad 327-Bldg. 457			Replaced				See Table 3-10; SWMU/AOC 244

**Table 3-1a
Site Summary
(Sheet 21 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
648	PCB T75	3F	Transformer-Missing, Pad 318-Bldg. 458			Unknown			X	See Table 3-10
649	PCB T76	3F	Transformer-9845884, Pad 311-Bldg. 460			Replaced			X	See Table 3-10
650	PCB T77	3F	Transformer-D317654, Pad 311-Bldg. 460			Replaced			X	See Table 3-10
651	PCB T78	3F	Transformer-J929874T71AA, Pad 319-Bldg. 464			Replaced			X	See Table 3-10
652	PCB T79	5A	Transformer-151103, Pad 251-Bldg. 482			Removed			X	See Table 3-10
653	PCB T80	2C	Transformer-B336887, Pad 401-Bldg. 532			Replaced			X	See Table 3-10
654	PCB T81	5A	Transformer-F-6947158, Pad 4114-Bldg. 605			Replaced			X	See Table 3-10
655	PCB T82	5A	Transformer-E-694715A, Pad 4113-Bldg. 606			Replaced			X	See Table 3-10
656	PCB T83	1C	Transformer-NA, Pole 166A-Bldg. 630			Unknown			X	See Table 3-10
657	PCB T84	4A	Transformer-10096-1, Pad 215-Bldg. 631			Replaced			X	See Table 3-10
658	PCB T85	2A	Transformer-PAV 1646-01, Pad 431-Bldg. 634			Removed			X	See Table 3-10
659	PCB T86	2A	Transformer-YAP-70141, Pad 431-Bldg. 634			Removed			X	See Table 3-10
660	PCB T87	3A	Transformer-10832-1, Pad 323-Bldg. 636			Replaced			X	See Table 3-10
661	PCB T88	4A	Transformer-12945-1, Pad 2513-Bldg. 655			Replaced			X	See Table 3-10
662	PCB T89	2A	Transformer-C173562, Pad 414-Bldg. 658			Replaced			X	See Table 3-10
663	PCB T90	4A	Transformer-11344577P73AA, Pad 216-Bldg. 617			Replaced			X	See Table 3-10
664	PCB T91	1D	Transformer-786787895, Pole 648-Bldg. 692			Removed			X	See Table 3-10
665	PCB T92	1D	Transformer-786787910, Pole 648-Bldg. 692			Removed			X	See Table 3-10
666	PCB T93	1D	Transformer-786787919, Pole 648-Bldg. 692			Removed			X	See Table 3-10
667	PCB T94	5A	Transformer-Westinghouse-Bldg. 716			Replaced			X	See Table 3-10
668	PCB T95	NA	Transformer-959077-Bldg. 1765			Unknown			X	See Table 3-10
669	PCB T96	2A	Transformer-5635257, Pole 917-Bldg. 5014			Unknown			X	See Table 3-10
670	PCB T97	2B	Transformer-6963930P, Pole 942-Bldg. 5201			Unknown			X	See Table 3-10
671	PCB T98	2C	Transformer-6969510, Pole 946-Bldg. 5240			Removed			X	See Table 3-10
672	PCB T99	1D	Transformer-7794141, Pole 666-Bldg. 5417			Removed			X	See Table 3-10
673	PCB T100	1D	Transformer-7794142, Pole 666-Bldg. 5417			Removed			X	See Table 3-10
674	PCB T101	1D	Transformer-7794143, Pole 666-Bldg. 5417			Removed			X	See Table 3-10
675	PCB T102	2C	Transformer-69680882, Pole 952A-Bldg. 5125			Unknown			X	See Table 3-10
676	PCB T103	1D	Transformer-793397, Pole 687-Bldg. 687			Removed			X	See Table 3-10
677	PCB T104	1D	Transformer-794144, Pole 687-Bldg. 687			Removed			X	See Table 3-10
678	PCB T105	1D	Transformer-6900519, Pole 687-Bldg. 687			Removed			X	See Table 3-10
679	PCB T106	5A	Transformer-6833177, Pad 215-Gate 9			Replaced			X	See Table 3-10
680	PCB T107	NA	Transformer-66F2984			Unknown			X	See Table 3-10
681	PCB T108	1F	Transformer- Pole 251			Removed			X	See Table 3-10
682	PCB T109	2A	Transformer- Pole 852-Tank Farm 6			Unknown			X	See Table 3-10
683	PCB T110	1B	Transformer-70609-Bldg. 271			Active			X	See Table 3-10
684	PCB T111	1B	Transformer-70465-Bldg. 271			Active			X	See Table 3-10
685	PCB T112	1B	Transformer-70464-Bldg. 271			Active			X	See Table 3-10
686	PCB T113	1B	Transformer-8335541-Bldg. 833			Active			X	See Table 3-10
687	PCB T114	1B	Transformer-8335544-Bldg. 833			Active			X	See Table 3-10
688	PCB T115	1B	Transformer-8335543-Bldg. 833			Active			X	See Table 3-10
689	PCB A1	4A	Transformer storage area near water tank 175							
690	PCB A2	4A	PCB equipment storage area near Bldg. 324							

**Table 3-1a
Site Summary
(Sheet 22 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
691	RFA 1	3F	Former scrap metal yard near golf course						X	See Table 3-13
692	RFA 2	3F	Vegetation piles near golf course						X	See Table 3-13
693	RFA 6	5A	Landfarming site NW of Bee Canyon Wash						X	See Table 3-13
694	RFA 7	4B	Transformer storage area east of Bee Canyon Wash						X	See Table 3-13
695	RFA 8	2F	Abandoned well 50-3285 west of Bldg. 809						X	See Table 3-13
696	RFA 9	5A	Fuel bladder east of Agua Chino Wash						X	See Table 3-13
697	RFA 12	NA	Active sanitary sewer lines ³						X	See Table 3-13
698	RFA 13	2A	Drop tank storage area SW of Bldgs. 114/115						X	See Table 3-13
699	RFA 14	5A	Drop tank fuel storage area NW of Bldg. 605			FA				See Table 3-13
700	RFA 15	5A	Wash water runoff site SW of fuel station 576						X	See Table 3-13
701	RFA 16	5A	Wash water runoff site NW of fuel station 574						X	See Table 3-13
702	RFA 28	5A	Fuel spill site						X	See Table 3-13
703	RFA 41	2A	Vehicle wash rack-Bldg. 127						X	See Table 3-13
704	RFA 46	3A	Equipment storage yard-Bldg. 163			FA				See Table 3-13
705	RFA 74	5A	Aircraft wash area-Bldg. 297						X	See Table 3-13
706	RFA 95	4A	Engine test cell-Bldg. 324						X	See Table 3-13
707	RFA 98	4B	Vehicle wash rack-Bldg. 359						X	See Table 3-13
708	RFA 100	4B	TCE degreaser-Bldg. 359						X	See Table 3-13
709	RFA 110	4A	Vehicle wash rack-Bldg. 386			FA				See Table 3-13
710	RFA 120	3A	Vehicle wash rack-Bldg. 390						X	See Table 3-13
711	RFA 125	2B	< 90-day accumulation area-Bldg. 415						X	See Table 3-13
712	RFA 128	4A	Storage area-Bldg. 445						X	See Table 3-13
713	RFA 131	3A	Engine test cell-Bldg. 447			FA				See Table 3-13
714	RFA 136	5A	Aircraft wash area-Bldg. 461						X	See Table 3-13
715	RFA 141	5A	Aircraft wash area-Bldg. 463						X	See Table 3-13
716	RFA 150	5A	Aircraft wash area-Bldg. 605						X	See Table 3-13
717	RFA 152	5A	Aircraft wash area-Bldg. 606						X	See Table 3-13
718	RFA 164	1G	Vehicle wash rack-Bldg. 651						X	See Table 3-13
719	RFA 178	3A	Vehicle wash rack-Bldg. 673						X	See Table 3-13
720	RFA 181	3B	Landfarming area-Bldg. 673						X	See Table 3-13
721	RFA 195	4A	Vehicle wash rack-Bldg. 758						X	See Table 3-13
722	RFA 198	4A	Vehicle wash rack-Bldg. 759			FA				See Table 3-13
723	RFA 201	4A	Vehicle wash rack-Bldg. 760			FA				See Table 3-13
724	RFA 204	5A	Vehicle wash rack-Bldg. 761			FA				See Table 3-13
725	RFA 210	5A	Vehicle wash rack-Bldg. 763						X	See Table 3-13
726	RFA 213	2A	Vehicle wash rack-Bldg. 764			FA				See Table 3-13
727	RFA 216	1A	Vehicle wash rack-Bldg. 765						X	See Table 3-13
728	RFA 219	1A	Vehicle wash rack-Bldg. 766						X	See Table 3-13
729	RFA 243	4A	Wash rack-Bldg. 96						X	See Table 3-13
730	RFA 245	3F	Golf course-Bldg. 464						X	See Table 3-13
731	RFA 246	3F	Golf course irrigation tank-Bldg. 459						X	See Table 3-13
732	RFA 247	NA	Water irrigation pipeline in SW and SE quadrants						X	See Table 3-13
733	RFA 253	4B	Wash rack-Bldg. 317						X	See Table 3-13

**Table 3-1a
Site Summary
(Sheet 23 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
734	RFA 257	5A	Wash water runoff site-Bldg. 575						X	See Table 3-13
735	RFA 258	5A	Wash water runoff site-Bldg. 577						X	See Table 3-13
736	RFA 260	3A	Above ground storage tank-Bldg. 389			FA				See Table 3-13
737	RFA 262	3A	Fuel storage area-Bldg. 390						X	See Table 3-13
738	RFA 264	3B	Equipment storage yard DRMO Lot #3						X	See Table 3-13
739	RFA 267	5A	Drop tank fuel storage area-Bldg. 605						X	See Table 3-13
740	RFA 268	1A	Vehicle wash rack-Bldg. 240						X	See Table 3-13
741	RFA 270	3F	Wash rack-Bldg. 817						X	See Table 3-13
742	RFA 273	1D	Wash rack-Bldg. 31						X	See Table 3-13
743	RFA 274	1D	Stockpiled soil-Bldg. 31						X	See Table 3-13
744	RFA 293	2A	Cleaning tank-Bldg. 130						X	See Table 3-13
745	RFA 297	5A	Former asphalt batch plant NE of golf course						X	See Table 3-13
746	RFA 299	4B	Wash rack-Bldg. 800						X	See Table 3-13
747	RFA 301	5A	Mark arrest system east side of Runway 34R						X	See Table 3-13
748	RFA 302	5A	Mark arrest system west side Runway 34R						X	See Table 3-13
749	RFA 304	4B	Trenches inside Bldg. 359						X	See Table 3-13
750	RFA 305	5C	Septic tank-Bldg. 601						X	See Table 3-13
751	RFA 306	1F	Septic tank-Bldg. 687						X	See Table 3-13
752	RFA 307	1F	Septic tank-Bldg. 819						X	See Table 3-13
753	TAA 2	1A	< 90-day accumulation area - Hanger 2			Active				See Table 3-9
754	TAA 5A	5A	< 90-day accumulation area-Bldg. 5			Inactive				See Table 3-13; SWMU/AOC 25
755	TAA 5B	1A	< 90-day accumulation area-Bldg. 5			Active				See Table 3-13; SWMU/AOC 26
756	TAA 7	5A	< 90-day accumulation area-Bldg. 7			Inactive				See Table 3-9
757	TAA 10	1A	< 90-day accumulation area-Bldg. 10			Active				See Table 3-13; SWMU/AOC 27
758	TAA 19	1A	< 90-day accumulation area-Bldg. 19			Inactive				See Table 3-9
759	TAA 22	1A	< 90-day accumulation area-Bldg. 22			Active				See Table 3-9
760	TAA 29A	1D	< 90-day accumulation area-Bldg. 29			Inactive				See Table 3-13; SWMU/AOC 30
761	TAA 29B	1D	< 90-day accumulation area-Bldg. 29			Inactive				See Table 3-13; SWMU/AOC 31
762	TAA 31A	1D	< 90-day accumulation area-Bldg. 31			Active				See Table 3-13; SWMU/AOC 272
763	TAA 31B	1D	< 90-day accumulation area-Bldg. 31			Inactive				See Table 3-9
764	TAA 51	1D	< 90-day accumulation area-Bldg. 51			Inactive				See Table 3-13; SWMU/AOC 33
765	TAA 77	1B	< 90-day accumulation area-Bldg. 77			Inactive				See Table 3-9
766	TAA 114	5A	< 90-day accumulation area-Bldg. 114			Inactive				See Table 3-13; SWMU/AOC 38
767	TAA 115	5A	< 90-day accumulation area-Bldg. 115			Inactive				See Table 3-13; SWMU/AOC 39

**Table 3-1a
Site Summary
(Sheet 24 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
768	TAA 130A	2A	< 90-day accumulation area-Bldg. 130			Inactive				See Table 3-13; SWMU/AOC 294
769	TAA 130B	2A	< 90-day accumulation area-Bldg. 130			Active				See Table 3-13; SWMU/AOC 295
770	TAA 130C	2A	< 90-day accumulation area-Bldg. 130			Inactive				See Table 3-13; SWMU/AOC 42
771	TAA 155A	5A	< 90-day accumulation area-Bldg. 155			Inactive				See Table 3-13; SWMU/AOC 240
772	TAA 155B	5A	< 90-day accumulation area-Bldg. 155			Inactive				See Table 3-13; SWMU/AOC 241
773	TAA 155C	5A	< 90-day accumulation area-Bldg. 155			Inactive				See Table 3-13; SWMU/AOC 45
774	TAA 240	1A	< 90-day accumulation area-Bldg. 240			Inactive				See Table 3-13; SWMU/AOC 64
775	TAA 242	1A	< 90-day accumulation area-Bldg. 242			Inactive				See Table 3-13; SWMU/AOC 67
776	TAA 289	5A	< 90-day accumulation area-Bldg. 289			Active				See Table 3-13; SWMU/AOC 70
777	TAA 297	5A	< 90-day accumulation area-Bldg. 297			Active				See Table 3-13; SWMU/AOC 73
778	TAA 298	4A	< 90-day accumulation area-Bldg. 298			Inactive				See Table 3-13; SWMU/AOC 83
779	TAA 306	4A	< 90-day accumulation area-Bldg. 306			Inactive				See Table 3-13; SWMU/AOC 88
780	TAA 307	4A	< 90-day accumulation area-Bldg. 307			Active				See Table 3-9
781	TAA 314	4A	Fuel storage locker-Bldg. 314			Inactive				See Table 3-13; SWMU/AOC 269
782	TAA 317	4B	< 90-day accumulation area-Bldg. 317			Inactive				See Table 3-13; SWMU/AOC 93
783	TAA 357	4A	< 90-day accumulation area -Bldg. 357			Inactive				See Table 3-13; SWMU/AOC 97
784	TAA 359A	4B	< 90-day accumulation area-Bldg. 359			Inactive				See Table 3-13; SWMU/AOC 254
785	TAA 359B	4B	< 90-day accumulation area-Bldg. 359			Inactive				See Table 3-13; SWMU/AOC 99
786	TAA 370	4A	Hazardous material storage/ < 90-day accumulation area-Bldg. 370			Active				See Table 3-9
787	TAA 371A	5A	< 90-day accumulation area-Bldg. 371			Active				See Table 3-13; SWMU/AOC 107
788	TAA 371B	5A	< 90-day accumulation area-Bldg. 371			Inactive				See Table 3-13; SWMU/AOC 242
789	TAA 386	4A	< 90-day accumulation area-Bldg. 386			Active				See Table 3-13; SWMU/AOC 114

**Table 3-1a
Site Summary
(Sheet 25 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
790	TAA 388A	4A	< 90-day accumulation area-Bldg. 388			Active				See Table 3-13; SWMU/AOC 116
791	TAA 388B	4A	< 90-day accumulation area-Bldg. 388			Inactive				See Table 3-13; SWMU/AOC 251
792	TAA 389A	3A	< 90-day accumulation area-Bldg. 389			Inactive				See Table 3-13; SWMU/AOC 119
793	TAA 389B	3A	< 90-day accumulation area-Bldg. 389			Inactive				See Table 3-13; SWMU/AOC 259
794	TAA 390A	3A	< 90-day accumulation area-Bldg. 390			Active				See Table 3-13; SWMU/AOC 122
795	TAA 390B	3A	< 90-day accumulation area-Bldg. 390			Inactive				See Table 3-13; SWMU/AOC 261
796	TAA 392A	2A	< 90-day accumulation area-Bldg. 392			Active				See Table 3-13; SWMU/AOC 124
797	TAA 392B	2A	< 90-day accumulation area-Bldg. 392			Inactive				See Table 3-13; SWMU/AOC 271
798	TAA 398	5A	< 90-day accumulation area-Bldg. 398			Inactive				See Table 3-13; SWMU/AOC 252
799	TAA 441	3A	< 90-day accumulation area-Bldg. 441			Inactive				See Table 3-13; SWMU/AOC 256
800	TAA 442	3A	< 90-day accumulation area-Bldg. 442			Inactive				See Table 3-13; SWMU/AOC 126
801	TAA 445	4A	< 90-day accumulation area-Bldg. 445			Inactive				See Table 3-13; SWMU/AOC 127
802	TAA 447	3A	< 90-day accumulation area-Bldg. 447			Inactive				See Table 3-13; SWMU/AOC 130
803	TAA 456	3A	< 90-day accumulation area-Bldg. 456			Inactive				See Table 3-13; SWMU/AOC 135
804	TAA 461	5A	< 90-day accumulation area-Bldg. 461			Inactive				See Table 3-13; SWMU/AOC 138
805	TAA 462	5A	< 90-day accumulation area-Bldg. 462			Inactive				See Table 3-13; SWMU/AOC 140
806	TAA 529	4A	< 90-day accumulation area-Bldg. 529			Inactive				See Table 3-13; SWMU/AOC 144
807	TAA 534	4B	< 90-day accumulation area-Bldg. 534			Inactive				See Table 3-13; SWMU/AOC 146
808	TAA 602	2A	< 90-day accumulation area-Bldg. 602			Inactive				See Table 3-13; SWMU/AOC 147
809	TAA 605	5A	< 90-day accumulation area-Bldg. 605			Active				See Table 3-13; SWMU/AOC 149
810	TAA 606	5A	< 90-day accumulation area-Bldg. 606			Inactive				See Table 3-13; SWMU/AOC 255
811	TAA 626	1B	< 90-day accumulation area-Bldg. 626			Active				See Table 3-9

**Table 3-1a
Site Summary
(Sheet 26 of 27)**

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
812	TAA 634	2A	< 90-day accumulation area-Bldg. 634			Active				See Table 3-9
813	TAA 636	3A	< 90-day accumulation area-Bldg. 636			Inactive				See Table 3-13; SWMU/AOC 160
814	TAA 651	1G	< 90-day accumulation area-Bldg. 651			Active				See Table 3-13; SWMU/AOC 165
815	TAA 658	2A	< 90-day accumulation area-Bldg. 658			Inactive				See Table 3-13; SWMU/AOC 171
816	TAA 671	4A	< 90-day accumulation area-Bldg. 671			Active				See Table 3-13; SWMU/AOC 172
817	TAA 672	4A	< 90-day accumulation area-Bldg. 672			Inactive				See Table 3-13; SWMU/AOC 177
818	TAA 673	3A	< 90-day accumulation area-Bldg. 673			Active				See Table 3-13; SWMU/AOC 186
819	TAA 693	1G	< 90-day accumulation area-Bldg. 693			Active				See Table 3-9
820	TAA 698	5A	< 90-day accumulation area-Bldg. 698			Inactive				See Table 3-9
821	TAA 744	1G	< 90-day accumulation area-Bldg. 744			Active				See Table 3-9
822	TAA 746	2A	< 90-day accumulation area-Bldg. 746			Active				See Table 3-9
823	TAA 747	2A	< 90-day accumulation area-Bldg. 747			Active				See Table 3-9
824	TAA 761	3A	< 90-day accumulation area-Bldg. 761			Inactive				See Table 3-13; SWMU/AOC 236
825	TAA 765	3F	< 90-day accumulation area-Bldg. 765			Inactive				See Table 3-13; SWMU/AOC 266
826	TAA 769	4A	< 90-day accumulation area-Bldg. 769			Inactive				See Table 3-13; SWMU/AOC 222
827	TAA 770	4A	< 90-day accumulation area-Bldg. 770			Inactive				See Table 3-13; SWMU/AOC 223
828	TAA 771	1D	< 90-day accumulation area-Bldg. 771			Inactive				See Table 3-13; SWMU/AOC 224
829	TAA 772	3F	< 90-day accumulation area-Bldg. 772			Inactive				See Table 3-13; SWMU/AOC 225
830	TAA 778	5A	< 90-day accumulation area-Bldg. 778			Inactive				See Table 3-13; SWMU/AOC 226
831	TAA 779	5A	< 90-day accumulation area-Bldg. 779			Inactive				See Table 3-13; SWMU/AOC 227
832	TAA 800	4B	< 90-day accumulation area-Bldg. 800			Active				See Table 3-13; SWMU/AOC 229
833	TAA 831	3A	< 90-day accumulation area-Bldg. 831			Active				See Table 3-9
834	TAA 856	3A	< 90-day accumulation area-Bldg. 856			Active				See Table 3-13; SWMU/AOC 234
835	TAA 900	2A	EO accumulation area-Bldg. 900			Active				See Table 3-9
836	BLD 673	3A	RCRA storage facility-Bldg. 673 T-3			Closed		RCRA		
837	SRU 1	1G	Silver recovery unit at hospital/dental clinic-Bldg. 439							Site conditions unknown

Table 3-1a
Site Summary
(Sheet 27 of 27)

Site No.	Database Tracking	Parcel	Description	Material Disposed	Date of Operation	Status	Risk to Human Health and the Environment ¹	Regulatory Mechanism	NFA	Comments
838	SRU 2	1G	Silver recovery unit at photo lab-Bldg. 443							Site conditions unknown
839	SRU 3	4A	Former photo lab silver recovery unit location-Bldg. 312							Site conditions unknown

Notes:

¹ The risk values were obtained from the Draft Phase II Work Plan prepared by Jacobs, November 1993. Risk values less than 1 are below residential US EPA Region IX Preliminary Remediation Goals (PRGs); risk values between 1 and 100 are within the range of residential PRGs; and risk values above 100 exceed residential PRGs.

² IRP Site 18 is defined as groundwater only and does not include source areas.

³ IRP Site 23 was evaluated in the RCRA Facility Assessment as SWMU/AOC 12.

⁴ IRP Site 24 was identified in the Draft Phase II RI Work Plan and consists of most of the southwest quadrant of the Station. This area encompasses numerous LOCs; however, LOCs located within the Site 24 boundary are considered independently from IRP Site 24.

Abbreviations:

APHO - aerial photograph	NA - not applicable. The LOC location is either unknown, or it covers multiple parcels
AST - aboveground storage tank	NFA - no further action
BLD - building	OWS - oil/water separator
EE/CA - Engineering Evaluation/Cost Analysis	PCB - polychlorinated biphenyl
EO - Environmental Office, MCAS El Toro	PCB A - PCB transformer storage area
FA - further action	PCB T - PCB transformer
FFA - Federal Facilities Agreement	RFA - RCRA (Resource Conservation and Recovery Act) Facility Assessment
gal - gallon(s)	RI - Remedial Investigation
Inst. - installed	SAIC - Science Applications International Corporation (refers to features/anomalies identified in SAIC report)
INT LF - possible landfills identified during interview	SRU - silver recovery unit
IRP - Installation Restoration Program	SWMU/AOC - Solid Waste Management Unit/Area of Concern
LOC - location of concern	TAA - temporary accumulation area
LPG - liquid propane gas	UST - underground storage tank
MSC B - miscellaneous LOC - burn pit	VOC - volatile organic compound
MSC P - miscellaneous LOC - pesticide storage area	

This table does not include buildings with known asbestos.

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-1b
Aerial Photograph Features/Anomalies
(Sheet 1 of 4)

Database Tracking	SAIC Anomaly ID No.	BCP Parcel	Point of Reference	Year	SAIC Observations ¹	SAIC Comments ²	Comments
APHO1	7	1A	Tank Farm 3	1946	ST	C	The stains appear adjacent to the southeastern side of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 113, 173, 190, 227, 235, and 272.
APHO2	14	2A	Bldg. 136	1946	OS, D	C	Miscellaneous equipment is stored along the southeast side of Bldg. 135. The ground surface is paved with asphalt, and surface runoff flows in a southwest direction.
APHO3	21	2A	Bldg. 120	1946	OS, D	C	Miscellaneous equipment is stored along the southeast side of Bldg. 120. The ground surface is paved with asphalt, and surface runoff flows in a southwest direction.
APHO4	22	2A	Tank Farm 4	1946	ST	C	Miscellaneous equipment is stored along all sides of this building. Portions of the ground surface along the east and west sides of the building are unpaved. Surface runoff flows in a southwesterly direction.
APHO5	25	1D	Bldg. 50	1946	OS	C	This area is commonly used for open storage. The ground surface is unpaved.
APHO6	39	4A	Bldg. 306	1946	IM	C	Unknown impoundments. Additional investigation recommended.
APHO7	46	4A	Bldg. 1389	1946	WS, ST, OS	C	The liquid is probably surface runoff.
APHO8	52	5A	Golf Course Hole 12	1946	OS, R, EX, FA	C	Portions of this storage area has been covered by the extension of runways 34-L and 34-R.
APHO9	53	5A	Agua Chinon Wash	1946	LQ	C	The liquid could be surface runoff flowing into Agua Chinon Wash.
APHO10	79	5A	Bldg. 286	1955	OS	A	The open storage area may be associated with Bldg. 286.
APHO11	81	4A	Bldg. 307	1955	TR, DG	C	This feature is located adjacent to the NW side of the storage yard for the trade shops and NE of Bldg. 307. Activities associated with the disturbed ground are unknown.
APHO12	92	3A	DRMO Yard 2	1958	WS	C	Two areas of wet soil are identified in this anomaly. One is located near the SE corner of the DRMO storage yard #2 (SWMU 46) and the other is located SW of Bldg. 457. No analytical data has been collected for the general area SW of Bldg 457.
APHO13	102	2B	Bldg. 415	1960	D	C	SWMU 125 is located on the NE side of Bldg. 415. The storage area featured in the photograph is located in an unpaved area on the NW side of the building. Also see anomalies 289 and 431
APHO14	105	2B	Horse Stables	1960	ST, WS	C	This feature is located near the horse stables. No HW-generating activities are known to have occurred at the stable area.
APHO15	113	5A	Tank Farm 3	1960	ST	C	Several stains appear at various locations adjacent to the parking apron near Tank Farm 3. It is possible that the stains could be due to runoff from the apron.

Table 3-1b
Aerial Photograph Features/Anomalies
(Sheet 2 of 4)

Database Tracking	SAIC Anomaly ID No.	BCP Parcel	Point of Reference	Year	SAIC Observations ¹	SAIC Comments ²	Comments
APHO16	115	1A	Tank Farm 3	1960	WS, LQ	C	The wet soil appears in a storage yard located adjacent to the SW side of Tank Farm 3. The storage yard is used to store vehicles and miscellaneous equipment.
APHO17	139	4A	Bldg. 357	1964	ST	C	Currently, this area is unpaved. A hazardous materials storage locker is located approximately 20 feet north of the anomaly.
APHO18	140	4A	Bldg. 324	1964	ST	C	These stains are located atop an asphalt parking area located west of Bldg 446.
APHO19	141	4A	Bldg. 309	1964	ST, LQ	C	Liquid flow could be due to surface runoff.
APHO20	164	3B	DRMO Yard 3	1967	EX, LQ	C	This anomaly is located near the corner of "Z" St. and North 3rd St. in an equipment storage yard. Also see anomalies 93 and 165.
APHO21	165	3A	DRMO Yard 3	1967	OS, D	C	This anomaly is located near the corner of "Z" St. and North 3rd St. in an equipment storage yard. Also see anomalies 93 and 164.
APHO22	172	1A	Bldg. 9	1967	ST, D	C	This area is currently unpaved and used as an equipment storage area.
APHO23	173	5A	Bldg. 14	1967	FBR, ST	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 190, 227, 235, and 272.
APHO24	176	5A	Runway 34-L & 34-R	1968	EXT	C	This anomaly is located in the unpaved area between Runways 34-L and 34-R. Could be surface water runoff.
APHO25	188	2A	Agua Chinon Wash	1968	MM, R	C	This feature is SW of RI Site 3/4. The mounded material could be soil dredged from Agua Chinon Wash.
APHO26	189	2A	Crash Crew Pit #2	1968	EX, LQ	C	This feature is located SW of the Crash Crew training pits. Unknown excavation activities.
APHO27	190	1A	Tank Farm 3	1968	ST, WS	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 227, 235, and 272.
APHO28	199	2A	Bldg. 138	1971	LQ	A	Probably surface runoff. No known washracks are in this area. An equipment storage area is located near Bldg. 138. Also see anomaly 238.
APHO29	206	1A	Bldg. 10	1971	WS, LQ	A	The liquid appears to be flowing across an unpaved area near SWMU 27. A benzene plume has been identified in the groundwater in this area. Also see anomaly 482.
APHO30	208	5B	Bodiers Nursery	1971	UO	C	Unknown object is located within the boundaries of Bordiers Nursery.
APHO31	215	3B	Golf Course Hole 5	1971	DG, MMDT, UO	C	Same as anomalies 161 and 287. This area has been known to store HW generated during Desert Storm.
APHO32	227	5A	Tank Farm 3	1971	ST	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 190, 235, and 272.

**Table 3-1b
Aerial Photograph Features/Anomalies
(Sheet 3 of 4)**

Database Tracking	SAIC Anomaly ID No.	BCP Parcel	Point of Reference	Year	SAIC Observations ¹	SAIC Comments ²	Comments
APHO33	233	1D	Bldg. 256	1973	OS	C	Mobile radar and communication equipment is commonly stored in this area. No samples have been collected from this area.
APHO34	235	1A	Tank Farm 3	1973	ST, UO, VT	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 190, 227, and 272.
APHO35	238	2A	Bldg. 137	1973	OS	C	Miscellaneous equipment is commonly stored adjacent to Bldgs. 137, 138, and 139. The activities that occur at these buildings is unknown. Also see anomaly 199.
APHO36	239	2A	Bldg. 291	1973	WS	C	In the 1970 U.S. EPA photograph, this area appears to be unpaved. No storage activities are identified in the U.S. EPA photograph.
APHO37	241	5A	Bldg. 115	1973	ST	C	SWMU 39 is located in this area. SWMU 39 was sampled and additional soil borings were recommended. Therefore, further investigation is recommended.
APHO38	252	3A	Bldg. 1789	1973	EX	C	Three pits are also identified in this general area in the 1970 U.S. EPA photograph. The use of the pits is unknown.
APHO39	258	5A	Bldg. 381	1973	WS, ST, HT	C	This structure appears to be Bldg. 381, former Crash Crew Station. According to the Station Building List, Bldg. 381 was demolished in 1986. Also see anomaly 449.
APHO40	271	1B	Bldg. 279	1974	D	C	The stain appears adjacent to Bldg. 281 (Admin./Class IV Package Store), which was demolished in 2/87. Currently, this area is an asphalt-paved parking lot.
APHO41	272	1A	Bldg. 287	1974	ST, WS	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 190, 227, and 235.
APHO42	281	3A	Bldg. 457	1974	WS	C	The 1970 U.S. EPA photographs also identified a few stains in this general area. U.S. EPA identified this area as an open storage area with drums. Currently, this area is a park. Also see anomalies 351 and 366.
APHO43	287	3B	Golf Course Hole 5	1974	EX	C	Same as anomalies 215 and 161. Unknown excavation.
APHO44	288	5C	Quarry Rd.	1974	DG, MM	C	Unknown reason for disturbed ground. No HW-generating activities are known to have occurred in this area.
APHO45	289	2B	Bldg. 415	1974	WS, ST, LQ, D	C	The storage area is located in an unpaved area on the NW side of Bldg. 415. Also see anomalies 102 and 431.
APHO46	416	3B	Golf Course Hole 5	1979	IM, FA, EX	C	May have been investigated as part of Site 5. Also see anomaly 452
APHO47	427	2B	Horse Stables	1980	OS, B, DB	C	Unknown activity. This area is located in the northern most corner of the rodeo area.

**Table 3-1b
Aerial Photograph Features/Anomalies
(Sheet 4 of 4)**

Database Tracking	SAIC Anomaly ID No.	BCP Parcel	Point of Reference	Year	SAIC Observations ¹	SAIC Comments ²	Comments
APHO48	431	2B	Bldg. 415	1980	OS, D	C	Bldg 415 is a warehouse used to store miscellaneous. The HWSA associated with this activity (SWMU 125) was investigated and sampled during the RFA. NFA recommended. Also see anomalies 102 and 289.
APHO49	449	5A	Runways 34-R & 7-L	1981	WS, LQ	C	Also see anomaly 258.
APHO50	450	5A	Tank Farm 5	1981	TR	C	Unknown trench.
APHO51	452	3B	Bldg. 673	1981	ST	C	Also see anomaly 416
APHO52	482	1A	Bldg. 240	1984	ST	C	Stain appears to be on unpaved area near SWMU 27. SWMU 27 was sampled during the RFA and NFA recommended. Also see anomaly 206.
APHO53	502	1A	Perimeter Rd. & Magazine Rd.	1987	ST	C	

Notes:

¹ The abbreviations in this column correspond to the following:

B - Building	FA - Fill area	OS - Open storage
D - Drums	FBR - Fuel bladder revetment	R - Refuse
DB - Debris	HT - Horizontal tank	ST - Stain
DG - Disturbed ground	IM - Impoundment	TR - Trench
DT - Dark-toned	LQ - Liquid	UO - Unidentified object
EX - Excavation	M - Material	VT - Vertical tank
EXT - Extraction	MM - Mounded material	WS - Wet soil

² The letters in this column correspond to the following:

A - Verification of a feature identified in U.S. EPA, 1991, "Site Analysis, El Toro MCAS" and occurring within the Sampling and Analysis Plan (SAP) Amendment RI/FS site boundaries.
 B - Features identified in SAIC assessment that occur within the SAP Amendment IRP site boundaries.
 C - Sites outside of the SAP Amendment RI/FS site boundaries

Abbreviations: APHO - aerial photograph anomaly
 DRMO - Defense Reutilization Marketing Office
 EPA - Environmental Protection Agency
 HW - hazardous waste
 HWSA - hazardous waste storage area
 NE - northeast
 NFA - no further action

NW - northwest
 RFA - Resource Conservation and Recovery Act (RCRA) Facility Assessment
 RI - Remedial Investigation
 SE - southeast
 SW - southwest
 SWMU - Solid Waste Management Unit

Table 3-2
Preliminary Location Summary
(Sheet 1 of 1)

POI Number	Description	PA/SI REPORT RESULTS/FINDINGS			Final Determination
		PA	SI	Findings	

Various Locations of Concern (LOCs) are identified in Table 3-1a. Additional Points of Interest (POIs) have not yet been identified for inclusion in this BCP. Table 3-2 will be revised as POIs are identified at the Station.

Abbreviations: PA – Preliminary Assessment
SI – Site Inspection
POI – point of interest

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-3
Early Action Status
(Sheet 1 of 2)

IRP Site No.	Action	Purpose	Status
4	draft final EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	Submitted for public review in October 1995. Final EE/CA expected by mid-1996.
7 (Unit 1)	draft final EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	Submitted for public review in October 1995. Final EE/CA expected by mid-1996.
7 (Unit 3)	EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	EE/CA scheduled for completion by March 1997.
8 (Units 1, 4)	EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	EE/CA scheduled for completion by March 1997.
11	draft final EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	Submitted for public review in October 1995. Final EE/CA expected by mid-1996.
12 (Unit 3)	EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	EE/CA scheduled for completion by March 1997.
13	draft final EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	Submitted for public review in October 1995. Final EE/CA expected by mid-1996.
14 (Unit 1)	draft final EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	Submitted for public review in October 1995. Final EE/CA expected by mid-1996.
19 (Unit 2)	draft final EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in shallow subsurface soils.	Submitted for public review in October 1995. Final EE/CA expected by mid-1996.

Table 3-3
Early Action Status
(Sheet 2 of 2)

IRP Site No.	Action	Purpose	Status
20 (Units 2 and 3)	draft final EE/CA	Minimize human exposure in present and future land use scenarios to contaminants in surface and shallow subsurface soils.	Submitted for public review in October 1995. Final EE/CA expected by mid-1996.
24	Soil gas survey	Identify potential shallow surface sources of VOC groundwater contamination.	Fieldwork completed in June 1994. Final technical memorandum submitted on 31 October 1994.
25	Soil gas survey	Further evaluate site for possible expedition of remediation.	Fieldwork completed in June 1994. Final technical memorandum submitted on 31 October 1994.

Table 3-3 will be updated as additional early actions at IRP sites are implemented and completed.

Abbreviations: IRP -- Installation Restoration Program

Table 3-4
Mission/Operational-Related Compliance Projects
(Sheet 1 of 1)

Project	Status	Regulatory Program
USTs	A draft UST Monitoring Plan was prepared for the Station and submitted in February 1993.	California UST Regulations
	The Station is currently working with the OCHCA to bring the Station USTs into compliance to obtain permits.	
	Installed vadose zone monitoring system at 12 USTs, tank level monitors in 27 USTs, liquid probes in 3 USTs, and <i>in situ</i> leak detection monitoring at 11 USTs.	
Asbestos and Lead-Based Paint Inspections	The Navy Public Works Center completed an asbestos and LBP investigation at the Station Family Housing and other related units.	TSCA
Repair/modification of various OWS units	Repair/modification activities have been completed on all but two OWS units.	NPDES

Abbreviations: UST – underground storage tank
 OCHCA – Orange County Health Care Agency
 LBP – lead-based paint
 TSCA – Toxic Substances Control Act
 OWS – oil/water separator
 NPDES – National Pollution Discharge Elimination System

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-5
Closure-Related Compliance Projects
(Sheet 1 of 1)

Project	Status	Regulatory Program
Removal of 108 USTs	Removal of these USTs will begin in 1996.	California UST Regulations OCHCA
Inspection of 43 former UST locations	Work is currently being performed under CLEAN II (CTO-075).	California UST Regulations OCHCA and RWQCB, Santa Ana
15 site assessment reports have been submitted	RWQCB has approved 9 sites for closure, and the remaining 6 sites are pending approval by the Navy and regulators.	RWQCB, Santa Ana
Free-product removal at Tank 398	Construction of the free-product removal system has begun.	California UST Regulations OCHCA and RWQCB, Santa Ana
Closure of RCRA storage facility (Building 673-T3)	The facility was closed in November 1995.	RCRA
Follow-up sampling at RFA SWMUs/AOCs recommended for further action	13 SWMUs/AOCs and one TAA were addressed in the draft final RFA addendum (December 1995).	RCRA
Evaluation of the less-than-90-day accumulation areas (TAAs)	73 TAAs on-Station were evaluated for removal and/or decontamination strategies.	RCRA
Repair/modification of various OWS units on-Station	Repair/modification activities are currently in progress. All but two repairs/modifications were completed in 1995.	NPDES

Abbreviations:

- UST – underground storage tank
- OCHCA – Orange County Health Care Agency
- CLEAN – Comprehensive Long-Term Environmental Action Navy
- RWQCB – Regional Water Quality Control Board
- RCRA – Resource Conservation and Recovery Act
- RFA – RCRA Facility Assessment
- SWMU/AOC – solid waste management unit/area of concern
- TAA – temporary accumulation area
- OWS – oil/water separator
- NPDES – National Pollution Discharge Elimination System

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-6
Compliance Early Action Status
(Sheet 1 of 1)

Site Number	UST Number	Action	Purpose	Status
Various ¹		Evaluation of less-than-90-day accumulation areas	Evaluate accumulation areas for removal and/or decontamination strategies	In progress
Building 398	398	Installation of free-product recovery system	Decrease groundwater source	In progress

Notes: ¹refer to Table 3-9 for a list of accumulation areas being evaluated

Abbreviations: UST – underground storage tank

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-7
Underground Storage Tank Inventory
(Sheet 1 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 1A	1A	1	1943	500 Steel	Diesel	Removed (3)	Information packet prepared by CLEAN II (CTO 75, 1995). Closure report states fill point is only area potentially requiring remediation. OC inspector's notes state that contamination levels can be left in place.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1991	Sand	X	Contaminated soil found in area of the fill pipe only. TPH levels at this area were 6900 ppm and 41 ppm. Highest BTEX levels: B = 3 ppb, T = 5 ppb	6
UST 1B	1B	1	1943	500 Steel	Diesel	Removed (3)	From JTL report: The excavation was backfilled with the contaminated soil, lined with the LDPE lining, and covered with washed concrete sand. Information packet prepared by CLEAN II (CTO 75, 1995)	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1991	Sand	X	Soil contamination found in area of the tank. Highest levels of TPH were 10,730 ppm and 10,460 ppm (east side of tank). Highest BTEX levels: B = 33 ppb, T = 168 ppb, X = 949 ppb, E = 1,062 ppb	6
UST 6A	6A	6	1943	1,000 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory Deactivated on 1/1/81.	Previously scheduled for 1996 removal. Removal date TDB.	1981	Sand			7
UST 6B	6B	6	1943	500 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory Deactivated on 1/1/81.	Tank scheduled for removal in 1996 or 1997	1981	Sand			7
UST 11	11	11	1943	500 Steel	Diesel	Removed (3)	From JTL report: Contaminated soil was left in place, hole was backfilled. Information packet prepared by CLEAN II (CTO 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1991	Sand	X	5 soil samples collected TPH (Diesel)=1,300 ppm, T = 6 ppb, X=6 ppb.	6
UST 12	12	12	1943	500 Steel	Diesel	Closed (8)	Site was approved for permanent closure by the RWQCB, Santa Ana Region	No further action required	1995	Sand	X	Highest TPH levels in soil taken from tank excavation were 240 ppm and 34 ppm around fill pipe opening. Highest BTEX levels under tank: T = 11 ppb, X = 46 ppb, E = 6 ppb.	3*
UST 13	13	13	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed on 12/13/91. Excavation backfilled using clean sand and native soil from hole	Soil results indicate no soil contamination (31 ppm TPH found) according to the JTL tank closure report. JTL report recommends closure to be considered final.	1991	Sand	X	The soil sample taken 2 ft under tank contained 31 ppm of TPH. All other samples were non-detects. BTEX not detected in samples.	3*
UST 14	14	14	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory A confirmed release was reported on 12/31/91 when tank and piping were removed. From JTL report: The excavation was backfilled with clean sand and native soil from excavation. Tank addressed under CLEAN II (CTO 75)	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	1991	Sand	X	Sample results for 2 ft under tank TPH = 2500 ppm, T = 9 ppb, and X = 8 ppb. All other samples were non detect for TPH and BTEX.	6
UST 24	24	24	1943	500 Steel	Diesel	Removed		Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1976	None			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 2 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 32	32	32	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST not found in a 20'x20'x12' area & thought to have been removed at an earlier date. Associated piping was removed on 12/19/91. 4 cubic yards of contaminated soil sent to landfill. Excavation lined with LDPE & backfilled with sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	1991	Sand	X	TPH levels in soils around tank were: 12,000 ppm (spoil pile), 720 & 180 ppm (west & east side of excavation, respectively), 132 ppm 2' under tank, & 110 ppm 20' west of tank under fill pipe, other samples=ND. Highest BTEX levels in spoil: X=2900 ppb, I=850 ppb	5
UST 33	33	33	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST removed on 12/23/91. Excavation lined with LDPE liner and backfilled with washed concrete sand. Information packet prepared by CLEAN II (C/O 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1991	Sand	X	TPH levels in soils around the tank 15,000 ppm (2" under tank), 910 & 560 ppm (west & east side of excavation), & 4,200 ppm at fill opening, other samples=ND. Highest BTEX levels under tank B= 47 ppb, I= 190 ppb, X= 1900 ppb, E= 480 ppb	6
UST 34	34	34	1943	500 Steel	Fuel oil	Removed (3)	From JTL report: UST not found in a 20'x20'x12' area & thought to have been removed at an earlier date. Associated piping removed on 12/19/91. Contaminated areas isolated, backfilled with spoil, lined with LDPE liner, & backfilled with clean fill, sand and	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	1991	Sand	X	TPH levels in soils around the tank were : ,000 & 500 ppm (south & north side of tank excavation), 1,500 ppm (spoil sample), 770 ppm (2' under tank) & 220 ppm at fill opening, other samples=ND. Highest BTEX level I=16 ppb, X=44 ppb, E=7 ppb	6
UST 35	35	35	1943	500 Steel	Fuel oil	Removed (3)	From JTL report: UST removed on 12/23/91. Excavation lined with LDPE liner and backfilled with clean fill. Information packet prepared by CLEAN II (C/O 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1991	Sand	X	TPH levels in soils around the tank were : 11,000 ppm (2" under tank), 9,200 & 41 ppm (west and east side of excavation), and 4,600 ppm at fill opening, other samples=ND. Highest BTEX level in west side excavation sample: X=150 ppb, I=41 ppb.	6
UST 37	37	37	1943	500 Steel	Diesel	Removed (3)	From JTL report: At removal, tank was full of fuel oil according to closure report. Excavation backfilled with gravel to four feet from the top of excavation. Remainder of excavation backfilled with native soil.	Soil results indicate no soil contamination (TPH/BTEX was found) according to the JTL tank closure report. JTL report recommends closure to be considered final.	1991	Fuel Oil	X	TPH levels in soils around the tank were : 66 ppm (2' under tank), 25 ppm (south side of excavation), and 17 ppm for the spoil pile. Other samples=ND. Highest BTEX levels under tank: I=7 ppb, X=77 ppb, E=8 ppb.	3*
UST 38	38	38	1943	1,500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB.		Sand			7
UST 40	40	40	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 12/19/91. Excavation backfilled with original native soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	1991	Unknown	X	TPH levels in soils around the tank were : 29 ppm (west side of excavation), and 19 ppm around fill pipe opening. Other samples=ND. Highest BTEX levels: X=43 ppb, E=6 ppb	3*
UST 41	41	41	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 12/19/91. Excavation backfilled with washed concrete sand and native soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	1991	None	X	TPH levels in soils around the tank were : 16 ppm around fill pipe opening, other samples=ND. Highest BTEX level around fill pipe opening: X= 35 ppb	3*

Table 3-7
Underground Storage Tank Inventory
(Sheet 3 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RTA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 42	42	42	1943	500 Steel	Fuel oil	Removed (1, 3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 12/19/91. Excavation backfilled with washed concrete sand and native soil.	JTL report recommends closure to be considered final.	1991	None	X	TPH and BTEX not detected in samples	2*
UST 43	43	43	1943	500 Steel	Fuel oil	Closed (9)	Site was approved for permanent closure by the RWQCB, Santa Ana Region	No further action required.	1995	None	X	TPH levels in soils around the tank were : 230 & 74 ppm (east & west side of tank excavation), 510 ppm (spoil sample), & 350 ppm at fill opening. Other samples=ND. Highest BTEX level around fill pipe opening: X=21 ppb	3*
UST 44	44	44	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory: Demolished facility and removed tank in 1960.		1960	None	Unknown		7
UST 45	45	45	1943	500 Steel	Fuel oil	Removed (3)	From 1993 Station UST Inventory: Demolished facility and removed tank in 1960.		1960	None	Unknown		7
UST 46	46	46	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed on 11/27/91. Excavation was backfilled with washed concrete sand and its original native soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	1991	Sand	X	TPH levels in soils around the tank were : 38 ppm (north side of tank excavation), other samples=ND. BTEX detected in sample taken from west side of excavation with B=26 ppb. Other samples=ND	3*
UST 47A	47A	47	1943	1,500 Steel	Diesel	Inactive	Not plotted on UST figures	Tank scheduled for removal in 1996 or 1997		Sand			7
UST 47B	47B	47	1943	1,500 Steel	Diesel	Inactive	Not plotted on UST figures	Tank scheduled for removal in 1996 or 1997		Sand			7
UST 47C	47C	47	1943	500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB.		Sand			7
UST 53	53	53	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory: UST removed on 12/13/91. Contaminated soil left in place, hole was backfilled. Information packet prepared by CLEAN II (CTO 75, 1995)	Contaminated soil discovered while removing tank per 1993 Station UST Inventory. Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1991	Unknown	Unknown	TPH (Diesel)=3,400 ppm, BTEX=ND.	6
UST 54A	54A	54	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed 2/4/92. Tank found empty. Excavation was lined with LDPE liner and backfilled with washed concrete sand	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	1992	Unknown	X	TPH levels in soils around the tank were : 19,000 ppm (2' under tank). Other samples were non-detect. BTEX detected in sample taken from under tank only: B=18 ppb, T=185 ppb, X=827 ppb, E= 141 ppb.	6
UST 54B	54B	54	1943	500 Steel	Diesel	Removed (5)		Tank scheduled for removal in 1996.		Unknown			7
UST 55A	55A	55	1943	5,000 Steel	Unknown	Inactive	Not plotted on UST figures, Figure 5-1, or Figure 3-4	Previously scheduled for 1996 removal. Removal date TDB.		Unknown			7
UST 55B	55B	55	1943	5,000 Steel	Unknown	Inactive	Not plotted on UST figures, Figure 5-1, or Figure 3-4	Previously scheduled for 1996 removal. Removal date TDB.		Unknown			7
UST 56A	56A	56	1943	550 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 or 1997		Sand			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 4 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 56B	56B	56	1943	1,400 Steel	Fuel oil	Removed (5)	AP unable to locate tank			Sand			7
UST 56C	56C	56	1943	500 Steel	Diesel	Inactive		Previously scheduled for 1996 removal. Removal date TDB		Sand			7
UST 57	57	57	1943	15,000 Concrete	Fuel oil	Removed (4)	UST 57 listed as a 5,000 gal steel UST in 1993 Station UST Inventory. AP removed a 15,000-gal concrete tank.		1993	Unknown	X	3 soil samples collected. TPH (Fuel Oil)=350 ppm, BTEX=ND	3*
UST 58	58	58	1943	5,300 Concrete	Diesel	Removed (4)	UST 58 listed as a 2,600 gal steel UST in 1993 Station UST Inventory. AP removed a 5,300-gal concrete tank. Information packet prepared by CLEAN II (CTO 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1993	Unknown	X	3 soil samples collected. TPH (Fuel Oil)=6,200-20,000 ppm, BTEX=ND	6
UST 59	59	59	1943	5,300 Concrete	Diesel	Removed (4)	UST 59 listed as a 2,600 gal steel UST in 1993 Station UST Inventory. AP removed a 5,300-gal concrete tank.		1993	Unknown	X	4 soil samples collected. TPH (Diesel)=87-1,900 ppm, T=140 ppb, E=40-1,400 ppb, X=200-6,000 ppb	6
UST 60	60	60	1943	2,000 Steel	Diesel	Inactive		Previously scheduled for 1996 removal. Removal date TDB		Sand			7
UST 62	62	62	1943	500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB	1962	Sand			7
UST 63A	63A	63	1943	500 Steel	Diesel	Removed (4)	From 1993 Station UST Inventory: 2 tanks connected by a manifold found and removed on 11/1/91. From CLEAN I (CTO 86) report: ~850gal of suspected product released into excavation when manifold between 63A and B was broken.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1991	Sand	X	TPH concentration for soil below tank was 24,000 ppm and for the soil stockpile was 33,000 ppm. BTEX levels were just above the detection limit.	6
UST 63B	63B	63	1943	500 Steel	Diesel	Removed	From '93 Station UST Inventory: Two tanks connected by a manifold found and removed on 11/1/91. From CLEAN I (CTO 86) report: ~850gal of suspected product released into excavation when manifold was broken. Excavation lined w/ plastic sheeting and backfilled.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1991	Sand	X	TPH concentrations for soil below tank was 18,000 ppm and for the soil stockpile was 33,000 ppm. BTEX levels were just above the detection limit.	6
UST 65A	65A	65	1943	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: In 1987 Survey tank size listed as 1400 gal; in the HPA registration form the tank size is listed as 1000 gal.	Tank scheduled for removal in 1996 or 1997.		Sand			7
UST 65B	65B	65	1943	2,000 Concrete	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB		Sand			7
UST 66A	66A	66	1943	1,100 Steel	Diesel	Closed (10)	Site was approved for permanent closure by the RWQCB, Santa Ana Region.	No further action required.	1995	Sand	X	4 soil samples collected. TPH (Fuel Oil)=360-1,300 ppm; BTEX=ND	6
UST 66B	66B	66	1943	1,500 Steel	Diesel	Inactive	AP unable to locate tank.			Unknown			7
UST 67A	67A	67	1943	1,500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB	1978	Sand			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 5 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status: ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 67B	67B	67	1943	1,500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB.	1978	Sand			7
UST 68	68	68	1943	500 Steel	Diesel	Removed (3)	From JTL report: Excavation was lined with LDPE liner and then backfilled with washed concrete sand. Information packet prepared by CLEAN II (CTO 75, 1995) for the RAC contractor.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report.	1992	Sand	X	TPH levels in soils around the tank were < 5,100 ppm (2' under tank). Other samples were non-detect. BTEX detected in sample taken from under tank only: B=109 ppb, T=104 ppb, X=114 ppb, E=9 ppb.	6
UST 69	69	69	1943	500 Steel	Fuel oil	Removed (1, 3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 1/30/92. Excavation was backfilled with washed concrete sand and original soil.	JTL report recommends closure to be considered final.	1960	Sand	X	TPH and BTEX not detected in all samples.	2*
UST 70	70	718	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: UST located under Building 718 on 12-4-91. Tank could not be removed.		1974	Sand			7
UST 71	71	71	1943	500 Steel	Fuel oil	Removed (3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 2/6/92. Excavation was backfilled with its original soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	1991	Sand	X	TPH not detected in soil samples. BTEX detected in sample taken from fill pipe area, X=34 ppb.	3*
UST 72	72	718	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: UST located under Building 718 on 12-4-91. Tank could not be removed.		1974	Sand			7
UST 73	73	73	1943	500 Steel	Diesel	Removed (5)	From 1993 Station UST Inventory: UST not found. Removed piping on 2/6/92.	No further investigation recommended in the 1993 Station UST Inventory.	1960	Sand	Unknown		7
UST 74	74	74	1943	500 Steel	Diesel	Removed (1)	UST not found in an excavated area 20'x20'x12'. Piping associated with the UST. From JTL report: was removed on 2/6/92. Excavation was backfilled with its original soil.	JTL report recommends closure to be considered final.	1960	Sand	X	TPH and BTEX not detected in all samples.	2*
UST 75A	75A	75	1943	500 Steel	Diesel	Closed (11)	Site was approved for permanent closure by the RWQCB, Santa Ana Region.	No further action required.	1995	Unknown	X	TPH levels in soils around tank were < 80,000 ppm for the spoil pile, other samples non-detect. Highest BTEX level in sample from spoil pile: B=94 ppb, T=1230 ppb, X=4160 ppb, E=848 ppb.	6
UST 75B	75B	75	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed 12/13/91. Tank found full of fuel oil. Excavation was backfilled with contaminated spoil, lined with LDPE liner, and backfilled with clean sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	1991	Unknown	X	TPH levels in soils around tank were < 2,900 ppm (2' under tank) and 9,700 and 28 ppm (south and north side of excavation), other samples non-detect. BTEX detected in spoil sample only: X=12 ppb.	6

Table 3-7
Underground Storage Tank Inventory
(Sheet 6 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 75C	75C	75	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Tank is located under 2-ft concrete dock supporting mechanical units.			Unknown			1
UST 77	77	77	1943	500 Steel	Diesel	Removed (1, 3)	From JTL report: UST removed on 2/14/91. Excavation backfilled with clean sand and original soil.	JTL report recommends closure to be considered final.	1992	Unknown	X	TPH & BTEX not detected in all samples	2*
UST 78	78	78	1943	500 Steel	Diesel	Removed	From JTL report: Tank removed 12/4/91 and was found full of fuel oil. Excavation was backfilled with contaminated soil, lined with LDPE liner, and backfilled with clean sand. Information packet prepared by CLEAN II (C/O 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1991	Sand	X	TPH levels in soils around tank were 25,000 ppm (2' under tank), 48,000 & 6,800 ppm (north & south side of excavation), 48,000 ppm (spoil), other samples=ND. Highest BTEX level detected in spoil sample: B=120 ppb, I=1200 ppb, X=6100 ppb, E=1200 ppb.	6
UST 79	79	79	1943	500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB.	1960	Sand			7
UST 80	80	80	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed 12/4/91 and was found full of fuel oil. Excavation was backfilled with contaminated soil, lined with LDPE liner, and backfilled with clean sand. Information packet prepared by CLEAN II (C/O 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1991	Sand	X	TPH levels in soils around tank were 32,000 ppm (2' under tank) and 2,500 ppm (northeast side of excavation), other samples non detect. Highest BTEX level detected in sample taken from under tank: B=220 ppb, I=240 ppb, X=9400 ppb, E=2100 ppb.	6
UST 81	81	81	1943	500 Steel	Diesel	Removed (1)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 1/30/92. Excavation backfilled with its original soil.	JTL report recommends closure to be considered final.	1960	Sand	X	TPH & BTEX not detected in all samples	2*
UST 82	82	82	1943	500 Steel	Diesel	Removed (1)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 1/12/92. Excavation backfilled with its original soil.	JTL report recommends closure to be considered final.	1960	Sand	X	TPH & BTEX not detected in all samples	2*
UST 83A	83A	83	1943	1,500 Steel	Fuel oil	Removed (4)	AP removed a 1,500 gal steel tank; excavation depth = 8 ft.		1993	Unknown	X	3 soil samples collected: TPH(Fuel Oil)=ND, BTEX=ND	2*
UST 83B	83B	83	1943	1,500 Steel	Fuel oil	Removed (4)	This tank was removed under contract CTO168 in January 1994 per El Toro staff.			Unknown	X	3 soil samples collected: TPH (Fuel Oil)=73 ppm, BTEX=ND	3*
UST 84A	84A	84	1943	1,500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Deactivated in 1978. Facility demolished in 1984.	Previously scheduled for 1996 removal. Removal date TDB.	1978	Unknown			7
UST 84B	84B	84	1943	1,500 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory: Deactivated in 1978. Facility demolished in 1984.	Previously scheduled for 1996 removal. Removal date TDB.	1978	Sand			7
UST 94	94	94	1943	1,500 Steel	Fuel oil	Closed (12)	Site was approved for permanent closure by the RWQCB, Santa Ana Region.	No further action required.	1995	Unknown	X	3 soil samples collected: TPH (Diesel)=62,300 ppm, TPH (Fuel Oil)=330 ppm, B=9 ppb, X=30 ppb.	3*

Table 3-7
Underground Storage Tank Inventory
(Sheet 7 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 98A	98A	98	1943	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory; Deactivated and filled with sand in 1974.	Tank scheduled for removal in 1996 or 1997.	1974	Sand			7
UST 98B	98B	98	1943	500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB.		Unknown			7
UST 105A	105A	105	1943	1,000 Steel	Fuel oil	Removed (5)	According to personnel at the Station Installation Department, this tank was removed on 27 Nov 92.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.		Sand			7
UST 105B	105B	105	1943	500 Steel	Diesel	Removed		No further investigation recommended in the 1993 Station UST Inventory because no soil contamination was discovered during UST removal.	1991	Sand	Unknown		7
UST 114A	114A	114	1966	1,500 Steel	Fuel oil	Removed	Tank removed 10/11/91. Excavation was backfilled and resurfaced with asphalt.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.		Unknown	X	TPH concentrations of 220 and 550 ppm detected in samples taken from the NW corner of the excavation and spoil pile, respectively. E= 8 ppb in spoil pile sample. BTEX not detected in other sample.	1*
UST 114B	114B	114	1966	560 Steel	Diesel	Removed (5)	Per OCHCA records do not indicate removal. From 1993 Station database: UST removed 10/11/91. No mention of contaminated soil.		1991	Sand	Unknown		7
UST 115A	115A	115	1943	650 Steel	Fuel oil	Removed (4)	AP removed a 650 gal steel tank. Information packet prepared by CLEAN II (CIC 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1993	Unknown	X	4 soil samples collected: TPH (Fuel Oil)=68-7,900 ppm, T=10-360 ppb, E=70-340 ppb, X=450-2,700 ppb	6
UST 115B	115B	115	1966	560 Steel	Fuel oil	Inactive per OCHCA	From 1993 Station UST report: 560-gal UST removed 6/17/93.		1993	Sand	Unknown		7
UST 116	116	116	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory; Deactivated and filled with sand in 1964.	Previously scheduled for 1996 removal. Removal date TDB.	1964	Sand			7
UST 117	117	117	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory; Deactivated and filled with sand in 1964.	Previously scheduled for 1996 removal. Removal date TDB.	1964	Sand			7
UST 126	126	126	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory: UST removed on 12/4/91. Contaminated soil left in place, hole was back-filled.	Contaminated soil discovered while removing tank according to the 1993 Station UST Inventory. Sample results are being evaluated by CLEAN II contractor for potential further action.	1991	Sand	X	Unknown number of soil samples collected: TPH (Diesel)=990-32,000 ppm, B=140 ppb, T=2,100 ppb, X=8-8,300 ppb, E=44-1,600 ppb	6
UST 130A	130A	130	Unknown	1,500 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 130B	130B	130	Unknown	1,500 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 133	133	133	1943	500 Steel	Diesel	Removed (1)	From JTL report: UST removed on 12/13/91. Excavation backfilled with washed concrete sand and original soil.	JTL report recommends closure to be considered final.	1991	Sand	X	TPH & BTEX not detected in all samples.	2*

Table 3-7
Underground Storage Tank Inventory
(Sheet 8 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 138	138	138	1943	1,000 Steel	Diesel	Inactive	From 1993 Station UST Inventory. Deactivated and filled with sand in 1974.	Tank scheduled for removal in 1996 or 1997.	1974	Sand			7
UST 146	146	146	Unknown	2,600 Concrete	Unknown	Removed	Removal of tank 146 was added to the AP contract. The tank was identified on as-builts as a 2,600-gal concrete tank. The material stored in the tank was not identified.		1993	Unknown	X	Tank removal soil sampling results are not available.	7
UST 159	159	159	1943	200 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory. Tank filled with sand on an unknown date.	Previously scheduled for 1996 removal. Removal date TDB.		Sand			7
UST 176	176	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av Gas, wastewater	Removed	Tank removed in 1995.	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1995	Empty		Soil: -10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	7
UST 177	177	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av Gas, wastewater, fuel oil	Removed	Tank removed in 1995.	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1995	Fuel oil		Soil: -10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	6*
UST 178	178	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av Gas, wastewater, fuel oil	Removed	Tank removed in 1995.	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1995	Fuel oil	X	RFA Results: 2-60' borings TRPH = 822 ppm in 10 boring; 126 ppm in bottom VOC's < CRDL; Additional sampling: Soil: -10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	6*
UST 179	179	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av Gas, wastewater, fuel oil	Removed	Tank removed in 1995.	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1995	Fuel oil	X	RFA Results: 2-60' borings TRPH = 63 - 72 ppm VOC's < CRDL; Additional sampling: Soil: -10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	6*
UST 180	180	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av Gas, wastewater	Removed	Tank removed in 1995.	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1995	Empty		Soil: -10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	6*
UST 181	181	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av Gas, wastewater, fuel oil	Removed	Tank removed in 1995.	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1995	Fuel oil		Soil: -10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	6*

Table 3-7
Underground Storage Tank Inventory
(Sheet 9 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 182	182	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av Gas, wastewater, fuel oil	Removed	Tank removed in 1995.	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1995	Fuel oil		Soil: ~10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	6*
UST 183	183	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av Gas, wastewater, fuel oil	Removed	Tank removed in 1995	Contamination is in excess of CA LUFT levels. Site remediation candidate under Contract N68711-93 D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1995	Fuel oil		Soil: ~10,000+ ppm TPH GW: 730 ug/l benzene in 13_UGMW32 3,370 ug/l diesel in 13_DBMW48	6*
UST 184	184	TF 1 (184)	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory. Tank decommissioned in 1965	Tank scheduled for removal in 1996.	1965	Wastewater			7
UST 185	185	TF 1 (185)	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory. Tank decommissioned in 1965.	Tank scheduled for removal in 1996	1965	Wastewater			7
UST 186	186	TF 1	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From RFA: SWMU 275-NFA. From 1993 Station UST Inventory. Tank decommissioned in 1965. From interview with El Toro Tank Farm staff, this tank located under asphalt in the static aircraft display area	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1996	1965	Wastewater	X	RFA Results: 2-60' borings TRPH/PH (gas), (Diesel) = ND VOC's < RDL	7
UST 187	187	TF 1	1943	50,000 Cylindrical Concrete	Aviation Gas/JP 5	Inactive	From RFA: SWMU 276-NFA. From 1993 Station UST Inventory. Tank decommissioned in 1965. According to El Toro Tank Farm staff, UST located in static display area under the asphalt	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1996	1965	Wastewater	X	RFA Results 2-60' borings: TRPH = 192 ppm TPH (Diesel) = 300 VOC's = ND	7
UST 188	188	TF 3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From RFA: SWMU 277-NFA. From 1993 Station UST Inventory. Tank decommissioned in 1970.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1996	1970	None	X	RFA Results: 2-60' borings: TRPH = 1050 ppm (10' sample only) X = 43 ppb	7
UST 189	189	TF 3 (272)	1943	50,000 Cylindrical Concrete	Waste Oil	Inactive	From RFA: SWMU 57-NFA. According to El Toro staff, contents of tank were emptied in January 1994	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1996.		Waste oil	X	RFA Results: 2-60' borings TRPH = 118 - 474 ppm VOC's < RDL	7
UST 190	190	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From RFA: SWMU 278-NFA. From 1993 Station UST Inventory. Tank demolished in 1967. El Toro tank list identifies this tank as removed, however, during the RFA this tank was determined to still be in place	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1996	1967	Wastewater	X	RFA Results: 2-60' borings: TRPH (gas/diesel) = ND VOC's < RDL	7
UST 191	191	TF 3 (272)	1943	25,000 Cylindrical Concrete	Waste Oil	Inactive	From RFA: SWMU 59-NFA. According to El Toro staff, contents of tank were emptied in January 1994	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1996	1993	Waste oil	X	RFA Results: 2-60' borings: TRPH = 80 - 116 ppm VOC's < RDL	7

Table 3-7
Underground Storage Tank Inventory
(Sheet 10 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 192	192	TF 3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. El Toro tank list identifies this tank as removed, however, during the RFA this tank was determined to still be in place.	Tank scheduled for removal in 1996.	1970	Wastewater			7
UST 193	193	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From RFA SWMU 279-NFA. From 1993 Station UST Inventory: Tank demolished in 1970. El Toro tank list identifies tank as removed, however, during the RFA this tank was determined to still be in place.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1996.	1970	Wastewater	X	RFA Results: 2-60' borings TRPH (gas/diesel) = ND VOCs < CRDL	7
UST 194	194	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. El Toro tank list identifies this tank as removed, however, during the RFA this tank was determined to still be in place.	Tank scheduled for removal in 1996.	1970	Wastewater			7
UST 195	195	TF 3	1943	25,000 Cylindrical Concrete	Waste Fuel	Inactive	From RFA SWMU 280-FA. From 1993 Station UST Inventory: Tank demolished in 1970. El Toro tank list identifies this tank as removed, however, during the RFA this tank was determined to still be in place.	Tank scheduled for removal in 1996.	1970	Wastewater	X	RFA Results: 2-60' borings TRPH = 592 - 1440 ppm (60' sample only) Gas = 2280 - 4880 ppm Diesel = 390 - 480 ppm X = 38,000 - 49,000 ppb E = 7,700 - 9,300 ppb	6
UST 196	196	TF 4	1943	25,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed.	Tank scheduled for removal in 1996.	1993	Waste Fuel			7
UST 197	197	TF 4	1943	50,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1996.	1993	Waste Fuel			7
UST 198	198	TF 4	1943	50,000 Cylindrical Concrete	JP-5	Inactive (7)	From 1993 Station UST Inventory: Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1996.		Wastewater			7

**Table 3-7
Underground Storage Tank Inventory
(Sheet 11 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 199	199	TF 4	1943	25,000 Cylindrical Concrete	JP-5	Inactive	From 1993 Station UST Inventory Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1996	1993	Waste Fuel			7
UST 200	200	TF 4	1943	25,000 Cylindrical Concrete	JP-5	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1996	1993	JP-5			7
UST 201	201	TF 4	1943	50,000 Cylindrical Concrete	JP 4	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1996	1993	JP-5			7
UST 202	202	TF 4	1943	50,000 Cylindrical Concrete	JP 4	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1996	1993	JP-5			7
UST 203	203	TF 4	1943	25,000 Cylindrical Concrete	JP 4	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1996	1993	JP-5			7
UST 204	204	TF 6 (196)	1943	50,000 Cylindrical Concrete	R JP-5	Inactive	From RFA: SWMU 60 not sampled; since tank passed leak test and no evidence of release, NFA recommended. From 1993 Station UST Inventory. Tank not needed, can be removed; Deactivated 8/93. According to El Toro Tank Farm Staff, tank inactive for 10 years.	Tank scheduled for removal in 1996	1993	R JP-5			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 12 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 205	205	TF 6 (396)	1943	25,000 Cylindrical Concrete	R JP-5	Inactive	From RFA: SWMU 61 - not sampled; since tank passed leak test and no evidence of release, NEA recommended. From 1993 Station UST Inventory: Tank not needed; can be removed; Deactivated 8/93. According to El Toro Tank Farm Staff, tank inactive for 10 years.	Tank scheduled for removal in 1996.	1993	R JP-5			7
UST 206	206	TF 6 (396)	1943	50,000 Cylindrical Concrete	Premium Gas	Active	From RFA: SWMU 62 - not sampled; since tank passed leak test. Vadose zone monitoring had readings of greater than 3,500 ppma.	Continuous vadose zone monitoring equipment for leaks along with spill containment are scheduled to be installed at this site.		Unleaded			7
UST 207	207	TF 6 (396)	1943	50,000 Cylindrical Concrete	Premium Gas	Active	From RFA: SWMU 63 - not sampled; since tank passed leak test and there is no evidence of release, NEA recommended.	Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		Unleaded			7
UST 208	208	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		Diesel			7
UST 209	209	TF 5	1943	25,000 Cylindrical Concrete	Recycled Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 210	210	TF 5	1943	25,000 Cylindrical Concrete	Aviation Gas, JP-5	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. According to El Toro Staff, tank was deactivated in 1972, not demolished, tank scheduled to be removed. From Jake Kormos files. In 1977, tank leaked due to tank coating applied out-of-spec.	Tank scheduled for removal in 1996. Remediation to be considered under contract N68711-93-D-1459, Delivery Order #24, Task 3: Vicinity of in-situ treatment pilot study.	1972	Aqueous		Soil: No analytical data GW: 230 ug/l benzene in 18_BGMW01A; 4,000ug/l diesel in 18_BGMW01A.	7
UST 211	211	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 212	212	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas, JP-5	Inactive	Per El Toro staff, tank has been out of use since 1972. From Jake Kormos files: Water leaked into tank through tank roof; not used to store fuel since 1977. CLEAN 1 CTOs 88 and 75 reports contain information on this site and vicinity, respectively.	Tank scheduled for removal in 1996. Remediation to be considered under contract N68711-93-D-1459, Delivery Order #24, Task 3: Vicinity of in-situ treatment pilot study.	1972	Aqueous		Soil: 140 ppm TPH-d GW: 230 ug/l benzene in 18_BGMW01A; 4,000ug/l diesel in 18_BGMW01A.	7

Table 3-7
Underground Storage Tank Inventory
(Sheet 13 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 213	213	TF 5	1943	25,000 Cylindrical Concrete	Recycled Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 214	214	TF 5	1943	25,000 Cylindrical Concrete	Aviation Gas, JP-5	Inactive	From Jake Kormos files. In 1977, tank leaked due to tank coating applied out-of-spec.	Tank scheduled for removal in 1996. Remediation to be considered under contract N68711-93-D-1459, Delivery Order #24. Task 3: Vicinity of in-situ treatment pilot study.	1990	Aqueous		Soil: No analytical data GW: 230 ug/l benzene in 18_BGMW01A; 4,000ug/l diesel in 18_BGMW01A.	7
UST 215	215	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas	Active		Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 216	216	TF 4 (1538)	1943	50,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory. Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1996.		Diesel			7
UST 217	217	TF 4 (1538)	1943	25,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory. Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1996.	1993	Diesel			7
UST 218	218	TF 4 (1538)	1943	25,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory. Tank not needed and can be removed. From Jake Kormos files. In 1981, tank was filled with unleaded fuel and leaked due to poorly installed tank coating.	A CVZME, listed in the JEG Draft Monitoring Plan, will not be installed according to El Toro Tank Farm staff. Tank scheduled for removal in 1996.	1993	Diesel			7
UST 219	219	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory. Tank demolished in 1970. During a geophysical survey conducted prior to the RFA field effort, these tanks were determined to still be in place.	Tank scheduled for removal in 1996.	1970	Wastewater			7
UST 220	220	TF 3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory. Tank demolished in 1970. During a geophysical survey conducted prior to the RFA field effort, these tanks were determined to still be in place.	Tank scheduled for removal in 1996.	1970	Wastewater			7

**Table 3-7
Underground Storage Tank Inventory
(Sheet 14 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 221	221	1F-3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. During a geophysical survey conducted prior to the RFA field effort, these tanks were determined to still be in place.	Tank scheduled for removal in 1996	1970	Wastewater			7
UST 224	224	224	1943	500 Steel	Fuel Oil	Inactive	From 1993 Station UST Inventory: Facility demolished and tank filled with sand in 1959	Tank scheduled for removal in 1996 or 1997	1959	Sand			7
UST 240A	240A	240	1944	8,000 Steel	Aviation Gas	Removed (5)	From 1993 Station UST Inventory: Tank was removed when tank 797 was installed		1985	Unknown			7
UST 240B	240B	240	1982	185 Steel	Waste Oil	Inactive	From RFA SWMU 65-NFA; receives waste oil from OWS 240C.	Tanks scheduled for removal in 1997		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOC's < CRDL	7
UST 241	241	241	1945	850 Steel	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 850 gal steel tank in 1993	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1993	Sand	X	2 soil samples collected TPH (Fuel Oil)= 25,000 ppm, b=1,400 ppb, X=9,100 ppb	6
UST 243	243	243	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500-gal concrete tank in 1993. Information packet prepared by CLEAN II (C/O 75, 1995).	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation	1993	Sand	X	3 soil samples collected TPH (Fuel Oil)= 290-11,000 ppm, BTEX=ND	6
UST 247	247	247	1945	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Facility demolished and tank filled with sand in 1977	Tank scheduled for removal in 1996 or 1997	1977	Sand			7
UST 248	248	248	1945	1,500 Concrete	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 1,500 gal concrete tank in 1993.		1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)= 79 ppm, BTEX=ND	3*
UST 249	249	249	1945	1,500 Concrete	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 1,500 gal concrete tank in 1993.		1993	Sand	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND	2*
UST 250	250	250	1945	1,500 Concrete	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 1,500 gal concrete tank in 1993.		1993	Sand	X	2 soil samples collected: TPH (Fuel Oil)=77 ppm, BTEX=ND	3*
UST 251	251	251	1944	2,000 Concrete	Fuel oil	Removed	From 1993 Station UST Inventory: 1987 Survey - Tank listed as removed.		1987	None	Unknown		7
UST 252	252	252	Unknown	1,400 Concrete	Diesel	Inactive	From RFA SWMU 281-not sampled, UST not located. Not plotted on UST figures.	Tank scheduled for removal in 1996 or 1997.		Sand			7
UST 253	253	253	1945	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Deactivated in 1948. Tank filled with sand in 1961.	Tank scheduled for removal in 1996 or 1997.	1948	Sand			7
UST 254	254	254	1958	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Tank deactivated in 1961 and filled with sand in 1977	Tank scheduled for removal in 1996 or 1997.	1961	Sand			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 15 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 255	255	255	1945	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory. Tank deactivated and filled with sand in 1961.	Tank scheduled for removal in 1996 or 1997.	1961	Sand			7
UST 256	256	256	1945	2,000 Concrete	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB.		Sand			7
UST 257	257	257	1944	1,400 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.		Sand			7
UST 258	258	258	1944	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory. Facility demolished in 1987. 1987 Survey lists tank as being filled with sand.	Tank scheduled for removal in 1996 or 1997.	1987	Sand			7
UST 259	259	259	1945	2,600 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory. Facility demolished and tank filled with sand in 1962.		1962	Sand			7
UST 260	260	260	1945	2,600 Concrete	Fuel oil	Removed (5)	From 1993 Station UST Inventory. Facility demolished and tank filled with sand in 1979. Tank is identified as being removed in a memorandum dated 19 October 1994 from D. Detmers.		1979	Sand			7
UST 262A	262A	262	1944	2,600 Concrete	Diesel	Removed	From 1993 Station UST Inventory. Tank was removed on an unknown date. Tank filled with sand in 1979. El Toro contract records show tank removed 1990. Not plotted on UST figures.		1990	Sand	Unknown		7
UST 262B	262B	262	1944	2,600 Concrete	Diesel	Removed	From 1993 Station UST Inventory. Tank was removed at an unknown date. Tank filled with sand in 1979. El Toro contract records show tank removed 1990.		1990	Sand	Unknown		7
UST 263	263	263	1945	3,400 Concrete	Diesel	Removed (4)	From 1993 Station UST Inventory. UST removed 5/11/93. AP removed a 3,400 gal concrete tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	5 soil samples collected. TPH (Diesel)=3,100-5,900 ppm, T=80 ppb, F=360 ppb, X=1,000 ppb.	6
UST 264	264	264	1945	3,400 Concrete	Diesel	Removed	From the 1993 Station UST Inventory. UST removed 5/10/93. AP removed a 3,400gal concrete tank in 1993.		1993	Unknown	X	3 soil samples collected. TPH (Diesel)=650-7,200 ppm, T=10-50 ppb, X=330-640 ppb.	6
UST 265	265	265	Unknown	1,400 Concrete	Diesel	Inactive		Tank scheduled for removal in 1996 or 1997.		Sand			7
UST 266	266	266	1945	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory. Facility demolished and tank filled with sand in 1974.	Tank scheduled for removal in 1996 or 1997.	1974	Sand			7
UST 267	267	267	1945	1,400 Concrete		Inactive	From 1993 Station UST Inventory. Tank filled with sand in 1982.	Tank scheduled for removal in 1996 or 1997.	1982	Sand			7
UST 268	268	268	1945	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory. Tank filled with sand in 1982.	Tank scheduled for removal in 1996 or 1997.	1982	Sand			7
UST 269	269	269	1945	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory. Tank filled with sand in 1974.	Tank scheduled for removal in 1996 or 1997.	1974	Sand			7
UST 270	270	270	1945	1,400 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory. Tank filled with sand in 1974.	Tank scheduled for removal in 1996 or 1997.	1974	Sand			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 16 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 271A	271A	271	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank		1993	Sand	X	³ soil samples collected: TPH (Fuel Oil)=85-4,300 ppm, BTEX=ND.	6
UST 271B	271B	271	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank		1993	Sand	X	3 soil samples collected: TPH (Fuel Oil)=300-5,000 ppm, BTEX=ND.	6
UST 271C	271C	271	1944	650 Concrete	Fuel oil	Removed (4)	AP removed a 650-gal concrete tank in 1993.		1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)=31 ppm, BTEX=ND.	3*
UST 271D	271D	271	1944	650 Concrete	Fuel oil	Removed (4)	AP removed a 650-gal concrete tank in 1993		1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)=3,400 ppm, BTEX=ND.	6
UST 272	272	272	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank	Sample results are being evaluated by CLEAN II contractor for potential further action	1993	Sand	X	³ soil samples collected: TPH (Fuel Oil)=67-14,200 ppm, BTEX=ND.	6
UST 273	273	273	1944	300 Steel	Fuel oil	Removed (4)	AP removed a 300gal steel tank. County records indicate that a concrete slab was observed in the excavation, the function of which is unknown. Information packet prepared by CLEAN II (CTO 75, 1995) for RAC contractor		1993	Sand	X	³ soil samples collected: TPH (Diesel)=140-720 ppm, TPH (Fuel Oil)=41-150 ppm, I=400 ppb, X=420 ppb.	6
UST 274	274	274	1945	1,400 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1980	Sand			7
UST 275	275	275	1944	1,500 Concrete	Fuel oil	Removed (5)	This tank is identified as being removed in a memorandum dated 19 October 1994 from D. Detmers	Electromagnetic and potholing surveys were conducted, however, the tank could not be located.	Unknown	Sand			7
UST 276	276	276	1945	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500-gal concrete tank	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	Unknown	Sand	X	4 soil samples collected: TPH (Fuel Oil)=1,900-17,000 ppm, I=460 ppb, X=2,900 ppb.	6
UST 277	277	277	1945	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500-gal concrete tank		1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)=34 ppm.	3*
UST 278A	278A	278	1945	1,500 Concrete	Fuel oil	Inactive			1982	Sand			7
UST 278B	278B	278	1945	1,400 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1982	Sand			7
UST 279	279	279	1945	1,500 Concrete	Fuel oil	Inactive				Sand			7
UST 280	280	280	1945	2,000 Concrete	Diesel	Removed	From CLEAN I (CTO 86) report (JEG): UST removed 10/5/91; Excavation was lined with plastic sheeting, backfilled, and resurfaced. Stockpiled soil removed for disposal on 11/1/91.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1991	Unknown	X	Sample results for northern edge of excavation: TPH sample diluted & concentration was 1,600 ppm; BTEX concentrations were: T=1,100 ppb, E=6,500 ppb, and X=5,300 ppb. Sample under tank contained 900 ppm TPH; BTEX levels slightly above detection limit.	6
UST 281	281	281	1944	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1987	Sand			7
UST 282	282	282	1945	1,400 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1980	Sand			7
UST 283	283	283	1945	1,400 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1980	Sand			7

**Table 3-7
Underground Storage Tank Inventory
(Sheet 17 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 284	284	284	1945	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1974	Sand			7
UST 285	285	285	1944	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1979	Sand			7
UST 288	288	288	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank.		1993	Unknown	X	3 soil samples collected TPH (Fuel Oil)=12.56 ppm, BTEX=ND.	3*
UST 292	292	292	1944	1,400 Concrete	Diesel	Inactive		Tank scheduled for removal in 1996 or 1997.		Sand			7
UST 294	294	294	1944	1,500 Steel	Fuel oil	Inactive		Previously scheduled for 1996 removal. Removal date TDB.	1960	Sand			7
UST 295	295	295	1984	1,000 Fiberglass	Diesel	Removed (1)	From JEG report: UST removed on 10/15/91. Excavation backfilled and resurfaced with concrete.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	1991	Sand	X	TPH and BTEX were non-detect in samples.	2*
UST 296	296	296	1984	6,000 Fiberglass	Diesel	Removed (1)	From JEG report: UST removed on 10/15/91. Excavation was backfilled.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	1991	Sand	X	TPH and BTEX were non-detect in samples.	2*
UST 297A	297A	297	1984	6,000 Fiberglass	Diesel	Removed (4)	From 1993 Station UST Inventory UST removed 6/11/93. AP removed a 6,000+ gal fiberglass tank.		1993	Unknown	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND, Trimethylbenzene=168 ppb.	3*
UST 297C	297C	297	1982	185 Steel	Waste Oil	Inactive	From RFA: SWMU 77 comb w/SWMU 76 NFA; receives waste oil from OWS 297B.	Tank scheduled for removal in 1997.		Waste oil	X	RFA Results 1.25' boring: TPH = 40 ppm VOCs < CRDL.	7
UST 298A	298A	298	1944	3,000 Steel	Unleaded	Active		An automatic tank-level monitoring system and spill containment were installed in 1993.		Unleaded			7
UST 298B	298B	298	1944	2,000 Steel	Diesel Fuel	Active	The automatic tank monitoring level system was not installed according to El Toro staff.			Diesel Fuel			7
UST 298D	298D	298	1982	185 Steel	Waste oil	Active	From RFA: SWMU 85 comb w/SWMU 84 FA; receives waste oil from OWS 298C. A new switching valve & box were installed in 2/94 according to El Toro staff.	Further investigation of the tank's current condition by leak testing and inspection is recommended.		Unknown	X	RFA Results 1.25' boring: TPH = 901.1 ppm VOCs < CRDL.	7
UST 304A	304A	304	1944	1,500 Concrete	Fuel oil	Removed (4)	From IEG&G report: UST 304A listed as a 500 gal steel No. 2 fuel oil tank. AP removed a 1,500 gal concrete fuel oil tank.		1993	Sand	X	4 soil samples collected: TPH (Diesel)=10.3,200 ppm, E=290 ppb, X=1,600 ppb.	6
UST 304B	304B	304	1944	1,400 Concrete	Fuel oil	Removed (5)	Exact site location is unknown.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1993	Sand			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 18 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 306	306	306	1944	500 Steel	Diesel	Removed (3)	From J11 report. Tank removed on 1/21/91. Excavation was backfilled with contaminated soil, lined with LDPE liner and then backfilled with washed concrete sand.	Further investigation of vertical and lateral extent of contamination recommended in J11 tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	1991	Unknown	X	TPH levels in soils around the tank were: 130 ppm (2' under tank) and 680 ppm (2' under pipe). TPH level in spoil sample was non detect. BTEX no detected in all samples.	3*
UST 314A	314A	314	1945	50,000 Concrete	Diesel	Inactive	SWMU 91 NFA. Standing water in vault noted during inspection on 7/13/93. The UST still contained ~ 1,000 gal of sludge. The tank is located on the west side of Bldg. 314. According to El Toro staff, tank contents removed in January 1994.	Tank scheduled for removal in 1996 or 1997. No further action recommended in the RFA based on soil sample results.	1993	Waste oil	X	RFA Results: 1-60', 1-25' boring TRPH = 86-249 ppm; VOC's < CRDL.	7
UST 314B	314B	314	1945	50,000 Concrete	Diesel	Inactive	SWMU 92 NFA. Standing water noted in vault during inspection on 7/13/93. The UST still contained ~ 1,000 gal of sludge. The tank is located on the west side of Bldg. 314. According to El Toro staff, tank contents were removed in January 1994.	Tank scheduled for removal in 1996 or 1997. No further action recommended in the RFA based on soil sample results.	1993	Waste oil	X	RFA Results: 2-60' borings TRPH = 69-416 ppm; VOC's < CRDL.	7
UST 321	321	321	1984	1,000 Fiberglass	Diesel	Removed (4)	From 1993 Station UST Inventory. UST removed 5/20/93. AP removed a 1,000 gal fiberglass tank in 1993.		1993	Unknown	X	4 soil samples collected. TPH (Fuel Oil)=ND. BTEX=ND.	2*
UST 322B	322B	322	Unknown	530 Steel	Diesel	Closed (13)	Site was approved for permanent closure by the RWQCB, Santa Ana Region.	No further action required.	1995	Unknown	X	3 soil samples collected. TPH (Fuel Oil)=16-38,000 ppm, T=880 ppb, E=720 ppb, X=4,900 ppb.	6
UST 324A	324A	324	1945	8,000 Steel	JP-5	Inactive	From 1993 Station UST Inventory. Vent is capped.	Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 324B	324B	324	1945	8,000 Steel	JP-5	Inactive	From 1993 Station UST Inventory. Vent is capped.	Tank scheduled for removal in 1996 or 1997.		Gasoline			7
UST 324C	324C	324	1945	8,000 Steel	JP-5	Inactive	From 1993 Station UST Inventory. Vent is capped.	Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 324D	324D	324	1945	8,000 Steel	JP-5	Inactive		Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 324E	324E	324	1984	2,000 Steel	Diesel	Inactive	From 1993 Station UST Inventory. UST removed 5/20/93. AP removed a 2,000-gal fiberglass tank in 1993.	Tank scheduled for removal in 1996 or 1997.	1993	Unknown	X	3 soil samples collected. TPH (Fuel Oil)=ND. BTEX=ND.	2*
UST 326A	326A	326	1945	1,700 Concrete	JP-5	Inactive	Tank was an OWS.	Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 326B	326B	326	1945	250 Steel	JP-5	Inactive	From RFA SWMU 283-NFA.	Tank scheduled for removal in 1996 or 1997. No further action recommended in the RFA based on soil sample results.		Unknown		RFA Results: 1-25' boring TRPH (gas/diesel) = ND; VOC's < CRDL.	7

Table 3-7
Underground Storage Tank Inventory
(Sheet 19 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 327	327	327	1945	2,600 Concrete	Diesel	Removed	From CLEAN I (C10 86) report (JEG, 1991): UST removed 10/1/91; soil visibly stained and odorous; tank was eroded and crumbling. Excavation was lined with plastic sheeting and backfilled.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1991	Unknown	X	Sample concentrations from: Under tank TPH=2,000 ppm, E & X=23 ppb; SW part of excavation TPH=8,900 ppm, E=5,600 ppb, X=5,100 ppb; Under fill lines TPH=12,000 ppm, E=3,200 ppb, X=7,500 ppb; Spoil sample TPH=9,500 ppm, E=590 ppb, X=1,100 ppb, X=4,800 ppb.	6
UST 328	328	328	1945	2,600 Concrete	Diesel	Removed	From CLEAN I (C10 86) report (JEG, 1991) report: UST removed 10/2/91; soil staining noticed throughout excavation; excavation lined w/ plastic sheeting and backfilled. Clean soil used to bring to grade, and grass was planted.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification/Site Remediation.	1991	Unknown	X	Sample concentrations from: Under tank TPH=16,000 ppm, E=4,800 ppb, X=12,000 ppb; SW part of excavation near fill line TPH=65,000 ppm, E=2,300 ppb, E=2,500 ppb, X=10,000 ppb. Soil sample TPH=13,000 ppm, E=1,100 ppb, X=4,800 ppb.	6
UST 329	329	329	1945	3,100 Concrete	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/11/93. AP removed a 3,100-gal concrete tank in 1993.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1993	Sand	X	2 soil samples collected TPH (Diesel)=4,200 ppm, BTEX=ND.	6
UST 335	335	335	1945	4,000 Steel	Fuel oil	Removed (5)				Sand			7
UST 337A	337A	337	1946	2,600 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1985	Sand			7
UST 337B	337B	337	1946	2,600 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1985	Sand			7
UST 347A	347A	347	1948	5,000 Steel	Gasoline	Removed (4)	AP removed a 5,000-gal steel tank in 1993.		1993	Sand	X	3 soil samples collected TPH (Gasoline)=5,600 ppm, B=82,000 ppb, T=320,000 ppb, E=120,000 ppb, X=650,000 ppb.	6
UST 347B	347B	347	1948	7,500 Steel	Gasoline	Removed (4)	AP removed a 7,500-gal steel tank in 1993.		1993	Sand	X	1 soil sample collected TPH (Gasoline)=ND, BTEX=ND.	2*
UST 347C	347C	347	1948	10,000 Steel	Gasoline	Removed (4)	AP removed a 10,000 gal steel tank in 1993.		1993	Sand	X	3 soil samples collected TPH (Gasoline)=4,000 ppm, B=20,000 ppb, T=180,000 ppb, E=78,000 ppb, X=380,000 ppb.	6
UST 347D	347D	347	1948	300 Steel	Waste oil	Removed (4)	From RFA: SWMU 284 - not sampled. AP removed a 300 gal steel waste oil tank in 1993.		1993	Unknown	X	Tank removal soil sample results not available.	7
UST 351	351	351	1944	500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 or 1997.	1960	Sand			7
UST 359A	359A	359	1984	1,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 303-NFA. AP removed a 1,000 gal fiberglass tank.	No further action recommended in the RFA based on soil sample results.	1993	Unknown	X	3 soil samples collected TPH (Fuel Oil)=ND, BTEX=ND.	2*
UST 359C	359C	359	1982	500 Fiberglass	Hazardous Waste	Removed (4)	From RFA: SWMU 102 - NFA. AP removed a 500-gal fiberglass tank in 1993.		1993	Spent Solvent	X	3 soil samples collected TPH=47-72 ppm, BTEX=ND, carbon tetrachloride=12 ppb. 1 sample inside tank TPH(C7-C26 range)=66,500 ppm.	6

Table 3-7
Underground Storage Tank Inventory
(Sheet 20 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 364A	364A	364	1952	2,000 Steel	Fuel oil	Removed (4)	AP removed a 2,000-gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	3 soil samples collected. TPH (Fuel Oil)=95-40,000 ppm. T=2,100 ppb, E=800 ppb, X=11,000 ppb.	6
UST 364B	364B	364	1952	5,300 Steel	Fuel oil	Removed (4)	AP removed a 5,300-gal steel fuel oil tank in 1993. Information packet prepared by CLEAN II (CIC 75, 1995) for RAC contractor.		1993	Unknown	X	These results are for 3 soil samples with identifier 364 (assumed to refer to 364B). TPH(Fuel Oil)=95-40,000 ppm. T=2,100 ppb, X=2,100 ppb, E=800 ppb.	6
UST 365	365	365	1954	2,500 Steel	Diesel	Removed			1988	Unknown	Unknown		7
UST 366	366	366	1954	2,500 Steel	Diesel	Abandoned in place	AP abandoned UST 366 in place. Tank was filled with a sand cement slurry & backfilled with uncontaminated soil. A soil sample was taken (maximum depth of typical soil sample was 3' below tank). Soil boring filled with cement.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Cement	X	2 soil samples collected. TPH (Fuel Oil)=2,400 ppm, E=330-450 ppb, X=1,800-2,300 ppb.	6
UST 367	367	367	1954	2,500 Steel	Diesel	Abandoned in place	AP abandoned UST 367 in place. Tank was filled with a sand cement slurry & backfilled with uncontaminated soil. A soil sample was taken (maximum depth of typical soil sample was 3' below tank). Soil boring filled with cement.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Cement	X	3 soil samples collected. TPH (Fuel Oil)=2,500-5,700 ppm, TRPH=2,500-40,000, BTEX=ND.	6
UST 368	368	368	1984	2,000 Fiberglass	Diesel	Removed	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 2,000-gal fiberglass tank in 1993.		1993	Unknown	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	2*
UST 369	369	369	1984	4,000 Fiberglass	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/19/93. AP removed a 4,000-gal fiberglass tank in 1993.		1993	Unknown	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	2*
UST 372A	372A	372	1954	1,000 Steel	Diesel	Active	From 1993 Station UST Inventory: Field inspection conducted on 7/28/93 discovered the tank was located in a restricted area. This tank was excluded from the AP tank removal contract.	An automatic tank-level monitoring system and spill containment were installed in 1993.		Fuel oil			7
UST 372B	372B	372	1954	2,500 Steel	Diesel	Closed (4)	Site was approved for permanent closure by the RWQCB, Santa Ana Region.	No further action required.	1995	Unknown	X	5 soil samples collected. TPH (Fuel Oil)=170 ppm, BTEX=ND.	3*
UST 374A	374A	374	1954	42,000 Concrete	Diesel	Removed (4)	From RFA: SWMU 263-NFA. Darkly stained soil noted; tank appeared full of a black and yellow liquid. AP removed a 42,000+ gal concrete tank in 1993.	No further action recommended in the RFA based on soil sample results. Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	4 soil samples collected. TPH (Fuel Oil) 30-65 ppm, BTEX=ND.	3*

**Table 3-7
Underground Storage Tank Inventory
(Sheet 21 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 374B	374B	374	1954	10,000 Steel	Diesel	Removed	AP removed a 10,000-gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	3 soil samples collected: TPH (Diesel)=2,300-13,000 ppm, B=2,500 ppb, I=5,400 ppb, X=40,000 ppb	6
UST 375	375	375	1954	10,000 Steel	Fuel oil	Removed (4)	From 1993 Station UST Inventory. Supply and return lines have been disconnected in the boiler room. From AP As-Built: This tank removed from the AP tank removal contract; tank noted as removed at an unknown date on drawings.		Unknown	Unknown	X	No contamination detected per OCHCA letter dated 23 May 1994. OCHCA plan check #89PC266	2*
UST 380A	380A	380	1954	10,500 Steel	Diesel	Removed (4)	From 1993 Station UST Inventory. UST removed 7/22/93. AP removed a 10,500-gal steel tank in 1993; noted that there was only one tank.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	5 soil samples collected: TPH (Diesel)=320-15,000 ppm, BTX=ND	6
UST 380B	380B	380	1954	600 Steel	Motor Gas	Removed	Per OCHCA letter dated 23 May 1994: 380B was not found during removal of 380A. It was suspected that 380B was an aboveground "day tank" associated with 380A. This has not been confirmed.			Unknown			7
UST 386A	386A	386	1984	1,000 Fiberglass	Diesel	Inactive		Tank scheduled for removal in 1996 or 1997.		Waste oil			7
UST 386C	386C	386	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 113-comb w/SWMU 112 NFA; receives waste oil from OWS 386B	No further action recommended in the RFA based on soil sample results.		Waste oil	X	RFA Results: 1-60' boring 1RPH = ND VOCs < CRDL	7
UST 388A	388A	388	1955	500 Steel	Diesel	Removed (4)	Per OCHCA: Suspected that steel tank was removed and replaced with double wall fiberglass tank in 1988. AP removed a 500-gal tank in 1993.		1993	Unknown	X	2 soil samples collected TPH=ND, BTX=ND	2*
UST 388B	388B	388	1955	2,000 Steel	Diesel	Active	From RFA: SWMU 117 - not sampled. Tank has a liquid probe according to El Toro staff. Per OCHCA: Suspected that steel tank was removed and replaced with a double wall fiberglass tank in 1988.			Unknown			7
UST 390A	390A	390	1955	550 Steel	Diesel	Removed (4)	AP removed a 550+ gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	1 soil sample collected TPH (Fuel Oil)=18 ppm, E=520 ppb, X=12,000 ppb	6
UST 390B	390B	390	1955	2,000 Steel	Diesel	Removed (4)	AP removed a 2,000 gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	4 soil samples collected TPH (Gasoline)=1,400 ppm, I=2,000 ppb, E=10,000 ppb, X=89,000 ppb	6

Table 3-7
Underground Storage Tank Inventory
(Sheet 22 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 392A	392A	392	1988	2,000	Unleaded	Active	From RFA: SWMU 298 FA; darkly stained soil noted. AP removed 550 gal steel tank (installed 1955, diesel) in 1993. Per El Toro staff, a 2,000-gal double-walled fiberglass fuel oil tank with a liquid probe was installed after tank was pulled in.	Further investigation of the newly installed tank's current condition by leak testing and inspection is recommended.	1993	Waste oil	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	7
UST 392B	392B	392	1955	2,000 Steel	Diesel	Active	OCHCA suspects that this tank was removed in 1988 and replaced with a double-wall fiberglass tank. Needs additional investigation.			Unknown			7
UST 392C	392C	392	Unknown	Unknown Steel	Diesel	Inactive	OCHCA suspects that this tank was removed in 1988 and replaced with a double-wall fiberglass tank. Needs additional investigation.	Tank scheduled for removal in 1997.		Sand			7
UST 398	398	397	1956	108,000 Steel	JP-5	Removed	UST 398 replaced by USTs 902A, B, & C which were installed in 1993 according to El Toro staff.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Verification of Subsurface Conditions including active and abandoned JP-5 distribution lines.		JP-5			6
UST 399	399	399	1955	500 Steel	Diesel	Inactive	From RFA: SWMU 285-not sampled, currently filled with sand.	Tank scheduled for removal in 1996 or 1997.		Sand			7
UST 404	404	414	1957	500 Steel	Diesel	Active	Located in a restricted area.	An automatic tank monitoring level system and spill containment were installed.		Unknown			7
UST 405	405	405	1956	1,200 Steel	Diesel	Removed (4)	AP removed a 1,200-gal steel tank in 1993.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1993		X	4 soil samples collected: TPH (Fuel Oil)=23-6,600 ppm, B=2,200 ppb, X=6,900 ppb.	6
UST 406	406	406	1956	1,200 Steel	Diesel	Removed (4)	AP removed a 1,200-gal steel tank in 1993.	Tank considered in remediation under Contract N68711-93-D-1459, Delivery Order #24, Task 2, Site Assessment Report candidate.	1993	Sand	X	4 soil samples collected: TPH (Fuel Oil)=74-5,400 ppm, B=320 ppb, X=1,600 ppb.	6
UST 414A	414A	414	1990	30,000 Fiberglass Coated Steel	JP-5	Inactive (7)	UST 414A monitored by a system similar to "Tank Watch" monitoring system used at USTs 902A,B,&C. UST T-A is a duplicate of UST 414A.			JP-5			7
UST 414B	414B	414	1990	30,000 Fiberglass Coated Steel	JP-5	Inactive (7)	UST 414B monitored by a system similar to "Tank Watch" monitoring system used at USTs 902A,B,&C. UST T-B is a duplicate of UST 414B.			JP-5			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 23 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 414C	414C	414	1990	2,500 Fiberglass Coated Steel	JP-5	Active	According to El Toro staff, UST is a fuel separator used to remove sediment and water from fuel prior to distribution, monitored by a system similar to the "Tank Watch" monitoring system at USTs 902A,B,&C. UST 1-C (SWMU 20) is a duplicate of UST 414C.			JP-5			7
UST 435	435	435	1959	1,000 Steel	Diesel	Removed	From JEG report, UST removed 10/11/91; residual product removed from tank and tank cleaned, excavation backfilled and seeded with grass.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	1991	Unknown	X	Sample concentrations Under tank TPH=320 ppm, BTEX=ND; Spill pile samples: TPH=1,300 ppm, BTEX=ND.	3*
UST 439A	439A	439	1959	5,000 Steel	Fuel oil	Removed (4)	AP removed a 5,000-gal steel fuel oil tank in 1993.		1993	Unknown	X	2 soil samples collected TPH (Fuel Oil)=22-49 ppm, BTEX=ND.	3*
UST 439B	439B	439	1959	5,000 Steel	Fuel oil	Removed (4)	AP removed a 5,000-gal steel fuel oil tank.		1993	Unknown	X	These results are for 2 soil samples with identifier 439 (assumed to refer to 439B). TPH(Diesel)=43 ppm, BTEX=ND.	3*
UST 442	442	442	1959	110 Steel	Fuel oil	Removed (4)	AP removed a 110-gal steel fuel oil tank in 1993.		1993	Unknown	X	1 soil sample collected TPH (Fuel Oil)=ND, BTEX=ND.	2*
UST 443	443	443	1959	1,000 Steel	Diesel	Closed (15)	Site was approved for permanent closure by the RWQCB, Santa Ana Region.	No further action required.	1995	Unknown	X	3 soil samples collected TPH (Fuel Oil)=150-16,300 ppm, TRPH=16,300, BTEX=ND.	6
UST 445A	445A	445	1959	10,000 Steel	Unknown	Inactive		Tank scheduled for removal in 1996 or 1997.	1990	Unknown			7
UST 445B	445B	445	1959	10,000 Steel	JP-5	Inactive		Tank scheduled for removal in 1996 or 1997.	1990	Unknown			7
UST 445C	445C	445	1959	100 Concrete	Waste oil	Inactive	From RFA, SWMU 129-NFA, stain on unpaved soil near pump units.	Tank scheduled for removal in 1996 or 1997. No further action recommended in the RFA based on soil sample results.	1990	Unknown	X	RFA Results 1-25' boring: TRPH = ND T = 19 ppb	7
UST 447A	447A	447	1959	10,000 Steel	JP-5	Inactive	Tank contained JP-5 according to El Toro personnel.	An automatic tank level monitoring system and spill containment were installed in 1993. Tank scheduled for removal in 1997.		JP-5			7
UST 447B	447B	447	1959	10,000 Steel	JP-5	Inactive	Tank contained JP-5 according to El Toro personnel.	An automatic tank level monitoring system and spill containment were installed in 1993. Tank scheduled for removal in 1997.		JP-5			7
UST 449	449	449	1959	3,000 Steel	Fuel oil	Closed (16)	Site was approved for permanent closure by the RWQCB, Santa Ana Region.	No further action required.	1995	Unknown	X	4 soil samples collected: TPH (Fuel Oil) 12-12,200 ppm, X=30 ppb.	6
UST 450	450	450	1959	3,000 Steel	Diesel	Removed (4)	AP removed a 3,000 gal steel tank in 1993.		1993	Unknown	X	4 soil samples collected TPH=ND, BTEX=ND.	2*
UST 451	451	451	1959	3,000 Steel	Diesel	Removed (4)	AP removed a 3,000 gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Unknown	X	4 soil samples collected TPH (Fuel Oil)=170-9,300 ppm, T=190 ppb, X=1,300 ppb.	6

Table 3-7
Underground Storage Tank Inventory
(Sheet 24 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 452	452	452	1959	3,000 Steel	Diesel	Removed (4)	AP removed a 3,000-gal steel tank in 1993.		1993	Unknown	X	4 soil samples collected. TPH (Fuel Oil)=47 ppm, BTEX=ND.	3*
UST 453	453	453	1960	1,500 Steel	Diesel	Inactive	From 1993 Station UST Inventory. Supply and return lines have been disconnected outside the building.	Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 454	454	454	1960	1,500 Steel	Diesel	Inactive	From 1993 Station UST Inventory. Supply and return lines have been disconnected outside the building.	Tank scheduled for removal in 1996 or 1997.		Unknown			7
UST 455	455	455	1960	1,500 Steel	Diesel	Removed (1)	From JEG report, UST removed 10/17/91, found UST filled with sand; excavation was backfilled and seeded with grass.	JEG report recommends closure to be considered final.	1991	Sand	X	TPH and BTEX not detected in samples.	2*
UST 457	457	457	1960	2,000 Steel	Diesel	Removed (4)	AP removed a 2,000-gal steel tank in 1993.		1993	Unknown	X	3 soil samples collected. TPH=ND, BTEX=ND.	2*
UST 461	461	461	1960	550 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 137 NFA. AP removed a 550-gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	1993	Unknown	X	Tank removal soil sample results not available.	7
UST 462	462	462	1960	550 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 139 NFA. AP removed a 550-gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	1993	Unknown	X	Tank removal soil sample results not available.	7
UST 463	463	463	1960	1,500 Steel	Diesel	Removed (4)	From RFA: SWMU 249 NFA; received waste oil from OWS 845 (SWMU 248). AP removed a 1,500-gal steel tank in 1993.	No further action recommended in the RFA based on soil sample results.	1993	Sand	X	5 soil samples collected. TPH (Fuel Oil)=40-5,400 ppm, I=20 ppb, X=30 ppb.	6
UST 473A	473A	473	1943	1,500 Steel	Diesel	Inactive	Building demolished. Location of UST unknown.		1971	Unknown			7
UST 473B	473B	473	1943	1,500 Steel	Diesel	Inactive	Building demolished. Location of UST unknown.		1971	Unknown			7
UST 493	493	493	1944	1,500 Concrete	Diesel	Inactive	From RFA: SWMU 143 not sampled, unable to locate tank; building no longer exists. Not plotted on UST figures, Figure 3-1, or Figure 3-4.		1987	Unknown			7
UST 529	529	529	1944	25,000 Concrete	Waste Oil	Inactive	From RFA: SWMU 145 FA.	Tank scheduled for removal in 1996 or 1997. Additional borings recommended in the RFA.		Waste oil	X	RFA Results: 2-60' borings: TRPH = 1,575 - 27,525 ppm I = 570 I - 2,100 ppb X = 4,100 - 13,000 ppb B = 360 B - 1,900 ppb	6
UST 547	547	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active	Vadose zone monitoring had readings of 440 ppm.	Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 548	548	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active		Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 25 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 549	549	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active	Vadose zone monitoring had readings of 200 ppm.	Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 550	550	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active	Vadose zone monitoring had readings of greater than 3,500 ppm.	Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 551	551	TF 555 (547)	1953	567,000 Steel	JP-5	Active		Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.		JP-5			7
UST 553	553	553	1956	10,000 Steel	Gasoline	Removed 4)	From 1993 Station UST Inventory. Contents of tank listed as diesel. AP removed a 10,000 gal steel gasoline tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Gasoline	X	2 soil samples collected: TPH (Gasoline)=260 ppm, BTEX=ND	6
UST 554	554	554	1956	10,000 Steel	Kerosene	Removed	From 1993 Station UST Inventory. Contents of tank listed as diesel. AP removed a 10,000 gal steel kerosene tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	1993	Kerosene	X	2 soil samples collected: TPH (Kerosene)=6,000 ppm, BTEX=ND	6
UST 568	568	568	1956	500 Steel	Diesel	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp. in January 1994.		Unknown			7
UST 574	574	574	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory. Removed and replaced with another UST. According to El Toro staff, USTs 398, 574, 575, 576, & 577 were replaced by USTs 902A, B, & C.		1993	JP-5	Unknown		7
UST 575	575	575	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory. Removed and replaced with another UST on 2/93. According to El Toro staff, USTs 398, and 574-577 were replaced by USTs 902A, B, & C.		1993	JP-5	Unknown		7
UST 576	576	576	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory. Removed and replaced with another UST on 2/93. According to El Toro staff, USTs 398, and 574-577 were replaced by USTs 902A, B, & C.		1993	JP-5	Unknown		7
UST 577	577	577	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory. Removed and replaced with another UST on 2/93. According to El Toro staff, USTs 398, and 574-577 were replaced by USTs 902A, B, & C.		1993	JP-5	Unknown		7
UST 579	579	579	1957	320 Steel	Unknown	Removed 4)	AP removed a 320-gal steel tank in 1994.		1993	Unknown	X	3 soil samples collected: TPH=ND, BTEX=ND.	2*

Table 3-7
Underground Storage Tank Inventory
(Sheet 26 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 581	581	581	1945	550 Steel	Diesel	Removed (4)	AP removed a 550-gal steel tank in 1993		1993	Unknown	X	3 soil samples collected TPH (Fuel Oil)=52-920, BTEX=ND	3*
UST 605A	605A	605	1965	1,700 Steel	Diesel	Removed	From JEG report: UST removed 10/8/91; excavation backfilled and resurfaced with asphalt	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final	1991	Unknown	X	TPH and BTEX not detected in samples taken from the excavation Spoil sample had a TPH=14 ppm, BTEX=ND	3*
UST 605B	605B	605	1965	500 Steel	Diesel	Removed (5)			1987	Unknown			?
UST 606A	606A	606	1965	1,700 Steel	Diesel	Removed	From 1993 Station UST Inventory: UST removed 10/8/91; Excavation backfilled and resurfaced with asphalt	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	1991	Unknown	X	TPH and BTEX not detected in samples taken from the excavation Spoil sample had a TPH=42 ppm, BTEX=ND	3*
UST 606B	606B	606	1965	500 Steel	Diesel	Inactive			1987	Unknown			?
UST 610A	610A	610	1966	300 Steel	Gasoline	Removed (4)	AP removed a 300-gal steel gasoline tank in 1993. Tank number changed from 610A to 610.		1993	Sand	X	2 soil samples collected TPH=ND, BTEX=ND	2*
UST 625	625	625	1967	1,500 Steel	Waste Oil	Inactive	From RFA: SWMU 156-not sampled; located within R/F/S Site 20 boundaries. From 1993 Station UST Inventory: Visually stained soil observed around fill pipe during a field inspection conducted on 7/21/93.	Stained soil observed around the fill pipe per 1993 Station UST Inventory. Further investigation may be required at this site. Tank scheduled for removal in 1996 or 1997.		Waste oil			?
UST 627	627	627	Unknown	Unknown Fiberglass	Diesel	Inactive	FAA Tank	Tank scheduled for removal in 1997		Unknown			?
UST 634	634	634	1969	10,000 Steel	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST 634 contents listed as Unleaded gasoline. AP removed a 10,000-gal steel tank in 1993.		1993	Unknown	X	Tank removal soil sampling results not available	?
UST 636	636	636	1969	1,500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Supply and return lines have been disconnected in the boiler room	Tank scheduled for removal in 1996 or 1997	1987	Unknown			?
UST 637.1	637.1	637	1969	12,000 Steel	Unleaded	Active		A leak detection monitoring system was installed per El Toro staff comments.		Unleaded			?
UST 637.2	637.2	637	1969	12,000 Steel	Unleaded	Active		A leak detection monitoring system was installed per El Toro staff comments.		Unleaded			?
UST 637.3	637.3	637	1969	12,000 Steel	Unleaded	Active		A leak detection monitoring system was installed per El Toro staff comments.		Unleaded			?
UST 643A	643A	643	1982	185 CPS	Waste oil	Inactive	From RFA: SWMU 162-NFA might be same as tank 696. Tank is an OWS.	Tank scheduled for removal in 1997		Waste oil	X	RFA Results: 1-25' boring HRPH = ND VOC's < CRDL	?
UST 651.1	651.1	651	1971	12,000 Steel	Unleaded	Active		An automatic tank level monitoring system and spill containment were installed per information provided by IT Corp in January 1994		Unleaded			?

**Table 3-7
Underground Storage Tank Inventory
(Sheet 27 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 651-2	651-2	651	1971	12,000 Steel	Unleaded	Active		An automatic tank-level monitoring system and spill containment were installed per information provided by IT Corp. in January 1994.		Unleaded			7
UST 651-3	651-3	651	1971	12,000 Steel	Unleaded	Active		An automatic tank-level monitoring system and spill containment were installed per information provided by IT Corp. in January 1994.		Unleaded			7
UST 651-4	651-4	651	1971	12,000 Steel	Unleaded	Active		An automatic tank-level monitoring system and spill containment were installed per information provided by IT Corp. in January 1994.		Unleaded			7
UST 651-5	651-5	651	1971	500 Steel	Waste oil	Active	From RFA: SWMU 166 not sampled; a dark circular stain extends ~6 in. around metal cover.	An automatic tank-level monitoring system and spill containment were installed per information provided by IT Corp. in January 1994.		Motor oil			7
UST 651-6	651-6	651	1971	500 Steel	New motor oil (bulk)	Active	From RFA: SWMU 167 not sampled; stained asphalt around fill box noted.	An automatic tank-level monitoring system and spill containment were installed per information provided by IT Corp. in January 1994.		Motor oil			7
UST 651-7	651-7	651	1971	500 Steel	New motor oil (bulk)	Active	From RFA: SWMU 168 not sampled; stains on pavement around fill box noted, extends to asphalt pavement bordering the fill box concrete pad.	An automatic tank-level monitoring system and spill containment were installed per information provided by IT Corp. in January 1994.		Waste oil			7
UST 655	655	655	1984	2,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 250-NFA; darkly stained pavement around fill box; contents identified as waste oil. AP removed a 2,000 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	1993	Sand	X	3 soil samples collected TPH=ND, BTEX=ND	2*
UST 658A	658A	658	1972	10,000 Steel	JP-5	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp. in January 1994.		JP-5			7
UST 658B	658B	658	1972	10,000 Steel	JP-5	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp. in January 1994.		JP-5			7
UST 662	662	662	1973	10,000 Steel	Fuel oil	Removed (4)	AP removed a 10,000 gal fiberglass tank in 1993.		1993	Unknown	X	3 soil samples collected TPH=ND, BTEX=ND	2*
UST 672	672	672	1972	500 Steel	Waste JP-5	Inactive	From RFA: SWMU 174 not sampled, not found during VSI	An automatic tank-level monitoring system and spill containment were installed per information provided by IT Corp. in January 1994. Tank scheduled for removal in 1997.		Waste JP-5			7
UST 672B	672B	672	1972	1,000 Steel	Waste Oil	Inactive	From RFA: SWMU 176-FA; asphalt eroded and stained around tank cover. From 1993 station UST Inventory: Release due to improper filling procedure. Area has been cleaned up.	RFA recommended additional borings. Tank scheduled for removal in 1997.		Waste oil	X	RFA Results: TRPH = 5,495 - 18,136 ppm TPH (gas) = 921 - 2,540 ppm TPH (diesel) = 87 - 26,700 ppm V = 120 - 3,300 ppb X = 6,000 - 39,000 ppb E = 740 - 7,800 ppb	6

**Table 3-7
Underground Storage Tank Inventory
(Sheet 28 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 673B	673B	673	1982	300 Steel	Waste oil	Active	From RFA: SWMU 180-comb w/SWMU 179-NFA; stains on asphalt near tank. Tank is an OWS.	No further action recommended in the RFA based on soil sample results.		Waste oil	X	RFA Results: 1-25' boring: IRPH = ND VOCs < CRDL.	7
UST 674A	674A	674	1982	500 Steel	Waste oil	Inactive	From RFA: SWMU 187-NFA; tank material listed as concrete. From 1993 Station UST Inventory: Tank material listed as steel. Receives waste oil from SWMU 189, the Bee Canyon OWS.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1997.		Waste oil	X	RFA Results: 1-60' boring: IRPH = 37 ppm VOCs < CRDL.	7
UST 674B	674B	674	1995	14 Steel	Waste oil	Active	OWS. Exempt from permit requirements. Operated by Installations. Not plotted on UST figures, Figure 3-1, or Figure 3-4.			Waste oil			7*
UST 675A	675A	675	1982	500 Concrete	Waste oil	Inactive	From RFA: SWMU 188-NFA; receives waste oil from SWMU 292, the Agua Chimon Wash OWS.	Tank scheduled for removal in 1997.		Waste oil	X	RFA Results: 1-60' boring: IRPH = 47 - 179 ppm TCE = 26 ppb.	7
UST 675B	675B	675	1995	14 Steel	Waste oil	Active	OWS. Exempt from permit requirements. Operated by Installations. Not plotted on UST figures, Figure 3-1, or Figure 3-4.			Waste oil			7*
UST 693A	693A	693	1975	500 Steel	Diesel	Removed	From JTL report: Tank removed 12/23/91 and was found empty. Excavation backfilled with washed concrete sand and original soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	1991	Unknown	X	TPH not detected in all samples. Highest BTEX level detected in sample taken from under tank: X=7 ppb.	3*
UST 693B	693B	693	1975	500 Steel	Diesel	Removed (1)	From JTL report: Tank removed 12/23/91 and was found empty. Excavation backfilled with washed concrete sand and original soil.	JTL report recommends closure to be considered final.	1991	Unknown	X	TPH and BTEX not detected in all samples.	2*
UST 706	706	706	1984	100 Steel	Diesel	Removed (5)	From RFA: SWMU 191 not sampled; tank not found during VSI; RFA recommends no further action. Building demolished. Not plotted on UST figures, Figure 3-1, or Figure 3-4.		1987	Unknown			7
UST 716A	716A	716	1976	3,000 Steel	Waste oil	Active	From RFA: SWMU 192-not sampled; tank material listed as fiberglass; used to store waste oil from OWS 716B. Tank material listed as steel in 1993 Station UST Inventory.	An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp. in January 1994.		Wastewater			7
UST 718	718	718	1978	4,000 Fiberglass	Fuel oil	Removed (4)	AP removed a 4,000 gal fiberglass tank in 1993.		1993	Unknown	X	1 soil sample collected: TPH=ND, BTEX=ND.	2*
UST 724A	724A	724	Unknown	1,000 Steel	Diesel	Active	Building demolished. Supplies fuel to the emergency generator in B372 (Air Traffic Control equipment). Not plotted on UST figures, Figure 3-1, or Figure 3-4.	Tank scheduled for removal in 1996.		Diesel			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 29 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 730	730	730	1978	1,000 Fiberglass	Diesel	Active	Field inspection conducted on 7/22/93	An automatic tank-level monitoring system and spill containment were installed per information provided by JT Corp. in January 1994.		Diesel			7
UST 733A	733 A	733	1980	10,000 Fiberglass	Diesel	Removed (4)	AP removed a 10,000 gal fiberglass tank in 1993.		1993	Unknown	X	Tank removal soil sampling results not available	7
UST 733B	733 B	733	1980	10,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 286-NFA. AP removed a 10,000 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results	1993	Unknown	X	Tank removal soil sampling results not available	7
UST 733C	733 C	733	1980	10,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 287-NFA. AP removed a 10,000 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	1993	Unknown	X	Tank removal soil sampling results not available	7
UST 733D	733 D	733	1980	10,000 Fiberglass	Diesel	Inactive	Newly identified by Station staff in December 1995.	Tank scheduled for removal in 1997.					7*
UST 758B	758B	758	1982	185 Steel		Active	From RFA: SWMU 197-comb w/SWMU 196-NFA; stores waste oil from OWS 758A.	No further action recommended in the RFA based on soil sample results		Waste oil	X	RFA Results: 1-25' boring TRPH = ND VOCs < CRDL	7
UST 759B	759B	759	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 200-comb w/SWMU 199-NFA; receives waste oil from OWS 759A.	Further investigation of the OWS's current condition by leak testing and inspection is recommended in the RFA. No recommendations were available for the tank.		Waste oil	X	RFA Results: 1-25' boring TRPH = 669 ppm (15' sample only) VOCs < CRDL	7
UST 760A	760A	760	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 202-NFA; receives waste oil from OWS 760B.	No further action recommended in the RFA based on soil sample results		Waste oil	X	RFA Results: 1-25' boring TRPH = ND VOCs < CRDL	7
UST 761B	761B	761	1982	500 Steel	Waste Oil	Active	From RFA: SWMU 206-comb w/SWMU 205-NFA; receives waste oil from OWS 761A.	No further action recommended in the RFA based on soil sample results		Waste oil	X	RFA Results: 1-25' boring TRPH = ND VOCs < CRDL	7
UST 762B	762B	390	1982	185 Steel	Waste Oil	Inactive	From RFA: SWMU 209-comb w/SWMU 208-NFA; receives waste oil from 762A.	Tank scheduled for removal in 1997.		Waste oil	X	RFA Results: 1-25' boring TRPH = ND VOCs < CRDL	7
UST 763B	763B	763	1982	500 Steel	Waste Oil	Active	From RFA: SWMU 212-comb w/SWMU 211-NFA; receives waste oil from 763A.	No further action recommended in the RFA based on soil sample results		Waste oil	X	RFA Results: 1-25' boring TRPH = ND VOCs < CRDL	7
UST 764A	764A	764	1982	500 Steel	Waste Oil	Active	From RFA: SWMU 214-NFA; receives waste oil from 764B.	No further action recommended in the RFA based on soil sample results		Waste oil	X	RFA Results: 1-25' boring TRPH = ND VOCs < CRDL	7
UST 765A	765A	765	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 217; receives waste oil from 765B. A field inspection conducted on 7/22/93 found no visible evidence of a UST in the area. This tank is an OWS.			Waste oil			7

**Table 3-7
Underground Storage Tank Inventory
(Sheet 30 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 766B	766B	766	1982	500 Steel	Waste Oil	Active	From RFA: SWMU 221-comb w/SWMU 220-NFA, receives waste oil from 766A. A field inspection conducted on 7/22/93 found no visible evidence of a UST in the area. Tank under repair/construction as of 2/94 according to El Toro staff	No further action recommended in the RFA based on soil sample results		Waste oil	X	RFA Results: 1-25' boring TRPH = 268 ppm (10' sample only) VOCs < CRDL	7
UST 782	782	782	Unknown	1,000 Steel	Gasoline	Inactive	UST found by an OCHCA Inspector; tank is inactive. Per El Toro staff, tank is active and has no monitoring system in place.	Tank scheduled for removal in 1996 or 1997		Unknown			7
UST 797	797	797	1985	10,000 Fiberglass	Aviation Gas	Active	This UST is a double-walled tank with a liquid probe in place according to El Toro staff			Aviation Gas			7
UST 800A	800A	800	1984	10,000 Fiberglass	Diesel Fuel	Active				Diesel			7
UST 800B	800B	800	1984	10,000 Fiberglass	Kerosene	Inactive (?)				Kerosene			7
UST 800C	800C	800	1984	10,000 Fiberglass	Diesel Fuel	Inactive (?)				Diesel			7
UST 800D	800D	800	1984	1,000 Fiberglass	Waste Oil	Inactive (?)	From RFA: SWMU 230-not sampled, concrete area around fill boxes stained due to filling and emptying of tank but does not appear soil has been impacted, recommended no further action.			Waste oil			7
UST 800E	800E	800	1984	1,000 Fiberglass	Waste Oil	Inactive (?)	From RFA: SWMU 231-NFA, tank failed tank test in 1990; concrete around fill box stained but soil does not appear impacted. EGG&G report reports tank passed leak test on 2/23/90	No further action recommended in the RFA based on soil sample results		Waste oil	X	RFA Results: 1-25' boring TRPH = 407 ppm (5' sample only) VOCs < CRDL	7
UST 850A	850 A	850	1988	5,000 Fiberglass	JP 5	Active	From RFA: SWMU 288 not sampled, within RI/FS Site 16 boundaries. Temporarily closed for repairs in 1990. El Toro staff did not know if a tank level monitor was in place at this UST.			JP 5			7
UST 850B	850 B	850	1988	5,000 Fiberglass	JP 5	Active	From RFA: SWMU 289 not sampled, within RI/FS Site 16 boundaries. Temporarily closed for repairs in 1990. El Toro staff did not know if a tank level monitor was in place at this site.			JP 5			7
UST 850C	850 C	850	1988	500 Fiberglass	Water	Active	From RFA: SWMU 290 not sampled, within RI/FS Site 16 boundaries. Temporarily closed for repairs in 1990.			Unknown			7
UST 891A	891A	414	1990	30,000 Fiberglass coated steel	JP 5	Active	Permalett leak detection monitoring system installed. Not plotted on UST figures, Figure 3-1, or Figure 3-4			JP 5			7*

**Table 3-7
Underground Storage Tank Inventory
(Sheet 31 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 891B	891B	414	1990	30,000 Fiberglass coated steel	JP-5	Active	Permalent leak detection monitoring system installed. Not plotted on UST figures, Figure 3-1, or Figure 3-4.			JP-5			7*
UST 891C	891C	414	1990	2,500 Fiberglass coated steel	JP-5	Active	Permalent leak detection monitoring system installed. Not plotted on UST figures, Figure 3-1, or Figure 3-4.			JP-5			7*
UST 902A	902A	902	1993	50,000 Fiberglass Coated Steel	JP-5	Active	Located in a restricted area. Has a "Tank Watch" monitoring system. USTs 902A-C replaced UST 398.			JP-5			7
UST 902B	902B	902	1993	50,000 Fiberglass Coated Steel	JP-5	Active	Located in a restricted area. Has "Tank Watch" monitoring system. USTs 902 A-C replaced UST 398.			JP-5			7
UST 902C	902C	902	1993	2,500 Fiberglass Coated Steel	JP-5	Active	Used fuel separator. Has "Tank Watch" monitoring system. USTs 902 A-C replaced UST 398.			JP-5			7
UST 5101	5101	5101	1943	500 Steel	Diesel	Inactive	Supplied fuel to boilers in Bldgs 5101 & 5102.			Unknown			7
UST 5102	5102	5102	1943	500 Steel	Fuel oil	Inactive				Unknown			7
UST 5201	5201	5201	1943	300 Steel	Fuel oil	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Sand	X		2*
UST 5202	5202	5202	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5203	5203	5203	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5204	5204	5204	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5205	5205	5205	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5206	5206	5206	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5207	5207	5207	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5208	5208	5208	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5209	5209	5209	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5210	5210	5210	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		1990	Unknown		Soil sample results not available.	7
UST 5211	5211	5211	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		1990	Unknown		Soil sample results not available.	7

Table 3-7
Underground Storage Tank Inventory
(Sheet 32 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 5212	5212	5212	1943	300 Steel	Diesel	Removed	Tank believed to be removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records. Site considered clean. Formal closure pending formal report		1990	Unknown	X	Soil sample results not available	2*
UST 5213	5213	5213	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5214	5214	5214	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5215	5215	5215	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5216	5216	5216	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5217	5217	5217	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5218	5218	5218	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5219	5219	5219	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5220	5220	5220	1943	300 Steel	Diesel	Inactive				Unknown			7
UST 5221	5221	5221	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		1990	Unknown		Soil sample results not available	7
UST 5222	5222	5222	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		1990	Unknown		Soil sample results not available	7
UST 5223	5223	5223	1943	300 Steel	Diesel	Inactive				Unknown			7
UST 5224	5224	5224	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		7
UST 5225	5225	5225	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5226	5226	5226	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5227	5227	5227	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5228	5228	5228	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5229	5229	5229	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5230	5230	5230	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5231	5231	5231	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5232	5232	5232	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5233	5233	5233	1943	300 Steel	Diesel	Closed (17)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*

**Table 3-7
Underground Storage Tank Inventory
(Sheet 33 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 5234	5234	5234	1943	300 Steel	Diesel	Closed (7)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5235	5235	5235	1943	300 Steel	Diesel	Closed (7)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5236	5236	5236	1943	300 Steel	Diesel	Closed (7)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5237	5237	5237	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		1990	Unknown		Soil sample results not available.	7
UST 5238	5238	5238	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		1990	Unknown		Soil sample results not available.	7
UST 5239	5239	5239	1943	300 Steel	Diesel	Closed (7)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5240	5240	5240	1943	300 Steel	Diesel	Removed (6)	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		1990	Unknown		Soil sample results not available.	2*
UST 5241	5241	5241	1943	300 Steel	Diesel	Closed (7)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5242	5242	5242	1943	300 Steel	Diesel	Closed (7)	Site was approved for permanent closure by the OCHCA.	No further action required.	1995	Unknown	X		2*
UST 5243	5243	5243	1943	300 Steel	Diesel	Inactive	Not plotted on UST figures, Figure 3.1, or Figure 3.4.		1995	Unknown			7
UST T-1	T-1	TF 555	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Active	From RFA: SWMU 23 not sampled; NFA recommended since tank normally is empty since its used for spill containment and there is no evidence of a release. Insitu leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF 555.			Waste JP-5			7
UST T-2	T-2	TF 4	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Inactive (7)	From RFA: SWMU 18 not sampled; tank normally empty since its used for spill containment; no evidence of release; NFA recommended. Insitu leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-4.	Tank scheduled for removal in 1996.		Waste JP-5			7
UST T-3	T-3	TF 4 (1538)	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Inactive (7)	From RFA: SWMU 19 not sampled; tank normally empty since its used for spill containment; no evidence of release; NFA recommended. Insitu leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-4.	Tank scheduled for removal in 1996.		Waste JP-5			7

**Table 3-7
Underground Storage Tank Inventory
(Sheet 34 of 35)**

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST T-4	T-4	272	1988	2,000 Fiberglass Coated Steel	Waste Oil	Active	From RFA: SWMU 58 not sampled; tank normally empty because its used for spill containment; no evidence of release; NFA recommended. Insitu leak detection monitoring in place. From EG&G report: Tank stores spilled fuel from Tanks 189 & 191.	Tank scheduled for removal in 1996		Waste Oil			7
UST T-4C	T-4C	TF 4	1988	2,000 Fiberglass Coated Steel	Waste JP 5	Inactive	Tank exempt from permitting requirements. Not plotted on UST figures, Figure 3-1, or Figure 3-4.	Tank scheduled for removal in 1997		Waste JP-5			7*
UST T-5	T-5	TF 4 (242)	1988	2,000 Fiberglass Coated Steel	Waste JP 5	Removed	From RFA: SWMU 17-not sampled; tank normally empty because its used for spill containment; no evidence of release; NFA recommended. Insitu leak detection monitoring in place. From EG&G report: Tank stores spilled fuel from TF-2.	Contamination is in excess of CA LUST levels. Remediation required; however no remedial activities have been scheduled to date.	1995	Aqueous	X		6*
UST T-6	T-6	TF 5	1988	2,000 Fiberglass Coated Steel	Aviation Gas	Active	From RFA: SWMU 21 not sampled; tank normally empty because its used for spill containment; no evidence of a release; NFA recommended. Insitu leak detection monitoring in place. From EG&G report: Tank stores spilled fuel from TF-5.			Diesel			7
UST T-7	T-7	TF 6 (396)	1988	2,000 Fiberglass Coated Steel	Waste JP 5	Inactive	From RFA: SWMU 24-not sampled; tank normally empty because its used for spill containment; no evidence of release; NFA recommended. Insitu leak detection monitoring in place. From EG&G report: Tank stores spilled fuel from TF 6.	Tank scheduled for removal in 1997		Waste JP 5			7
UST T-8	T-8	TF 5,6 (779)	1988	2,000 Fiberglass Coated Steel	Waste JP 5	Active	From RFA: SWMU 22-not sampled; tank is a spill containment tank and is normally empty; no evidence of a release; NFA recommended. Insitu leak detection monitoring in place. From EG&G report: Tank stores spilled fuel from TF 5 & 6.			Mogas			7
UST T-9	T-9	779	1988	2,000 Fiberglass Coated Steel	JP 5	Active	From RFA: SWMU 228-not sampled; NFA recommended because the tank has been installed recently and there is no evidence of a release. Insitu leak detection monitoring in place. From EG&G report: Tank is fuel stop tank near Bldg 779.			JP 5			7

Table 3-7
Underground Storage Tank Inventory
(Sheet 35 of 35)

Database Tracking	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status ¹	Comments	Further Action	Closure/ Removal/ Abandonment Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	ECP Area Type ²
UST 110	110	114	1988	1,000 Fiberglass Coated Steel	JP-5	Inactive (*)	From RFA SWMU 108 not sampled; NEA recommended based on recent installation date. Insitu leak detection monitoring in place. From FG&G report: Tank is fuel sump tank near Bldg 374.			Waste Fuel			1
UST 111	111	297	1988	1,000 Fiberglass Coated Steel	JP-5	Active	From RFA SWMU 75 not sampled; NEA recommended based on recent installation date. Insitu leak detection monitoring in place. From FG&G report: Tank is sump fuel tank between Bldg 297 & 388.			Waste Fuel			1

Notes:

¹ The following identifiers are used in this column:

- (1) Tank has been removed. Confirmation samples indicate contamination's regulatory action levels. Station needs to send letter to OCHCA stating closure of UST under Title 23 Article 2.
- (2) Status is based on MCAS El Toro UST Inventory List.
- (3) Tank was removed under contract number N62574-90-D-5661 as described in a memorandum dated 31 April 1992 from Karen Kirkpatrick to Paul Sherwood/Facilities Management Director.
- (4) Tank was removed under contract number N68711-91-C-0168 as described in a memorandum dated 2 March 1993 from David Crawley/Code 18 to Richard Barksdale/Code 18.
- (5) Status verified by personnel at the Station's Installations Department.
- (6) Tank was removed under contract 94-C-0674 as communicated by Lt. Hope Katchman to D. Hallerbach and S. Choi, CLEAN II contractors. (personal communication, December 1995).
- (7) Tank previously active, but assumed inactive because it does not appear on list of active tanks given to D. Hallerbach and S. Choi by Lt. Hope Katchman. (personal communication, December 1995).
- (8) Closure letter for UST 12 from RWQCB dated 12 December 1995.
- (9) Closure letter for UST 43 from RWQCB dated 11 December 1995.
- (10) Closure letter for UST 66A from RWQCB dated 11 December 1995.
- (11) Closure letter for UST 75A from RWQCB dated 12 December 1995.
- (12) Closure letter for UST 94 from RWQCB dated 11 December 1995.
- (13) Closure letter for UST 322B from RWQCB dated 12 December 1995.
- (14) Closure letter for UST 372B from RWQCB dated 11 December 1995.
- (15) Closure letter for UST 443 from RWQCB dated 12 December 1995.
- (16) Closure letter for UST 449 from RWQCB dated 11 December 1995.
- (17) Tanks approved for permanent closure by Ms. Arghavan Rashidi Band of OCHCA.

² An asterisk (*) indicates that the area type is pending BCL approval.

Abbreviations:

AP - American Processing (UST removal contractor)
BCL - BRAC Cleanup Team
BTEX - benzene, toluene, ethylbenzene, xylene
CA - California
CERCLA - device under Conditional Exemption for Specified Wastestreams per letter from DfSC dated 1/10/94
CRDL - contract required detection limit
CLO - Contract Task Order
CVZML - continuous vapor zone monitoring equipment
DfSC - Department of Toxic Substances Control
ECP - environmental condition of property
EPA - Environmental Protection Agency
FA - further action
gal - gallons
GW - groundwater
J - estimated value
JEG - Jacobs Engineering Group
JTL - JTL Environmental Remediation Group (UST removal contractor)
LUTL - leaking underground fuel tanks
NA - not applicable
ND - not detected

NEA - no further action
OC - Orange County
OCHCA - Orange County Health Care Agency
OWS - oil/water separator
ppb - parts per billion
ppm - parts per million
RJP-5 - recycled JP-5
RAC - Remedial Action Contract
RFA - Resource Conservation and Recovery Act (RCRA) Facility Assessment
RWQCB - Regional Water Quality Control Board
TBD - to be determined
TCE - trichloroethylene
TF - tank farm
TPH - modified EPA method 8015
TPH d - total petroleum hydrocarbons diesel
TPH l - EPA method 418.1
ug/l - micrograms per liter
UST - underground storage tank
VOCs - volatile organic compounds
VSI - visual site inspection

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-8
Aboveground Storage Tank Inventory
(Sheet 1 of 1)

Database Tracking	Location	Size/Contents	Status	AST No.	Source ¹	Parcel	ECP Area Type
AST 126	Building 126	300 gallons/10:10 Oil	Active	126	A	2A	7
AST 155	Building 155	200 gallons/Lube Oil	Active	155	A	5A	7
AST 245	Building 245	1,000 gallons/I.P.G	Active	245	B	1A	7
AST 317 ¹	Building 317	275 gallons/Fuel Oil	Inactive	317	D ² , E	4B	7
AST 318	Building 318	275 gallons/Fuel Oil	Inactive	318	D ² , E	4B	7
AST 319	Building 319	275 gallons/Fuel Oil	Inactive	319	D ² , E	4B	7
AST 390A	Building 390	500 gallons/Unleaded	Active	390A	A	3A	7
AST 390B	Building 390	500 gallons/Diesel	Active	390B	A	3A	7
AST 610B	Building 610	300 gallons/Diesel Fuel Oil	Active	610B	E	2A	7 ³
AST 619	Building 619	Unknown/Diesel	Active	619	D ² , E	3F	7
AST 626	Building 626	1,000 gallons/Waste Oil	Inactive	626	A	1B	7
AST 637	Building 637	500 gallons/Propane	Active	637	B	2A	7
AST 651	Building 651	1,000 gallons/Propane	Active	651	B	1G	7
AST 670	Building 670	Unknown/Liquid Propane Gas	Active	670	C	1G	7
AST 717	Building 717	500 gallons/Diesel	Active	717	A	5A	7
AST 753	Building 753	200 gallons/Pesticides	Active	753	A	4A	7
AST 797	Building 797	1,000 gallons/Waste Oil	Active	797	A	5A	7
AST 862	Building 862	30,000 gallons/JP-5	Active	862	A	4B	7

Notes: ¹ Letters in this column correspond to the following information sources:

- (A) Personal communications, R. Duffin/MCAS El Toro EO, February/March 1993
- (B) SAIC, Draft Oil and Hazardous Substances Spill Prevention and Countermeasure Plan and Contingency Plan, January 1994
- (C) MCAS El Toro Building Guide 1993
- (D) EG&G, MCAS El Toro Underground Storage Tank Survey Report, November 1990
- (E) Personal communications, Lt. H. Katcharian/MCAS El Toro EO, December 1995

² source D identified these tanks as underground storage tanks; the tanks were identified as aboveground storage tanks by Station staff (source E)

³ tank not plotted in Figure 3-1 and Figure 3-4

⁴ this area type designation has not been approved by the BCT

Abbreviations: AST – aboveground storage tank
ECP – environmental condition of property
EO – Environmental Office

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-9
Less-Than-90-Day Accumulation Areas
(Sheet 1 of 6)

Database Tracking	Building Number	Parcel	Status	Closure Evaluation ¹	SWMU/ AOC	RFA Sampling	Comments	ECP Area Type ²
TAA 2	2	1A	Active	X	-		Identified in 1994 SPCC Plan. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 5A	5	5A	Inactive	X	25		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 5B	5	1A	Active	X	26	X	RFA recommended excavation of shallow stained soil. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	6
TAA 7	7	5A	Inactive	X	-	X	Identified in 1994 SPCC Plan. In draft final draft final RFA Addendum (BNI, 1995) nine samples collected from three locations; a "release" was not detected; NFA recommended.	2*
TAA 10	10	1A	Active	X	27	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2*
TAA 19	19	1A	Inactive		-		Identified in Station's HW Open Drum Inspection Report	7
TAA 22	22	1A	Active	X	-		Identified in 1994 SPCC Plan. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 29A	29	1D	Inactive	X	30	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed; area has been cleaned as of 12/94 Area clean and vacant as of 11/95	3*
TAA 29B	29	1D	Inactive	X	31		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed; area has been cleaned as of 12/94 Area clean and vacant as of 11/95	3*
TAA 31A	31	1D	Active	X	272	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 31B	31	1D	Inactive	X	-		Identified in 1994 SPCC Plan. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 51	51	1D	Inactive	X	33	X	Excavate shallow stained soil. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	6
TAA 77	77	1B	Inactive		-		Identified in Station's HW Open Drum Inspection Report	7
TAA 114	114	5A	Inactive	X	38		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 115	115	5A	Inactive	X	39	X	From draft final RFA Addendum (BNI, 1995); four soil samples collected at one location; SVOCs detected below PRGs at about 8.5 feet, confirming CLEAN I results; a "release" was not detected; NFA recommended.	3*
TAA 130A	130	2A	Inactive	X	294		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2

Table 3-9
Less-Than-90-Day Accumulation Areas
(Sheet 2 of 6)

Database Tracking	Building Number	Parcel	Status	Closure Evaluation ¹	SWMU/ AOC	RFA Sampling	Comments	ECP Area Type ²
TAA 130B	130	2A	Active	X	295		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 130C	130	2A	Inactive	X	42		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
	137		Active		-		Not plotted on Figure 3-1 or Figure 3-4.	7*
TAA 155A	155	5A	Inactive	X	240		No evidence of release. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 155B	155	5A	Inactive	X	241	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 155C	155	5A	Inactive	X	45	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 240	240	1A	Inactive	X	64		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 242	242	1A	Inactive	X	67		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 289	289	5A	Active	X	70	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
IRP 7	295	5A	Active		71		Installation Restoration Program Site 7 ³	6
IRP 7	296	5A	Inactive		72		Installation Restoration Program Site 7 ³	6
TAA 297	297	5A	Active	X	73	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 298	298	4A	Inactive	X	83	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 306	306	4A	Inactive	X	88	X	74 shallow soil samples collected from 47 locations; PCBs detected in shallow soils 0 - 2 feet) over a wide area and the extent of the PCB "release" was assessed. Transfer to the RAC for surface soil removal action (draft final RFA addendum, 1995).	6*
TAA 307	307	4A	Active		-		Identified in Station's HW Open Drum Inspection Report	7
TAA 314	314	4A	Inactive	X	269	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 317	317	4B	Inactive	X	93		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
IRP 21	320	4B	Active		94		Installation Restoration Program Site 21 ³	6
TAA 357	357	4A	Inactive	X	97		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2

Table 3-9
Less-Than-90-Day Accumulation Areas
(Sheet 3 of 6)

Database Tracking	Building Number	Parcel	Status	Closure Evaluation ¹	SWMU/ AOC	RFA Sampling	Comments	ECP Area Type ²
TAA 359A	359	4B	Inactive	X	254		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 359B	359	4B	Inactive	X	99	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
IRP 8	360	4B	Inactive		104		Installation Restoration Program Site 8 ³	6
IRP 8	360	4B	Inactive		105		Installation Restoration Program Site 8 ³	6
IRP 8	360	4B	Inactive		106		Installation Restoration Program Site 8 ³	6
TAA 370	370	4A	Active	X			Identified in 1994 SPCC Plan. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 371A	371	5A	Active	X	107	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 371B	371	5A	Inactive	X	242	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 386	386	4A	Active	X	114		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 388A	388	4A	Active	X	116	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 388B	388	4A	Inactive	X	251		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 389A	389	3A	Inactive	X	119		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 389B	389	3A	Inactive	X	259		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 390A	390	3A	Active	X	122		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 390B	390	3A	Inactive	X	261	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 392A	392	2A	Active	X	124	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 392B	392	2A	Inactive	X	271	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 398	398	5A	Inactive	X	252	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3

Table 3-9
Less-Than-90-Day Accumulation Areas
(Sheet 4 of 6)

Database Tracking	Building Number	Parcel	Status	Closure Evaluation ¹	SWMU/AOC	RFA Sampling	Comments	ECP Area Type ²
TAA 441	441	3A	Inactive	X	256	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 442	442	3A	Inactive	X	126		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
-	443		Active		-		Not plotted on Figure 3-1 or Figure 3-4.	7*
TAA 445	445	4A	Inactive	X	127		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 447	447	3A	Inactive	X	130	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 456	456	3A	Inactive	X	135		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 461	461	5A	Inactive	X	138	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 462	462	5A	Inactive	X	140		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 529	529	4A	Inactive	X	144	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 534	534	4B	Inactive	X	146		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 602	602	2A	Inactive	X	147	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 605	605	5A	Active	X	149	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 606	606	5A	Inactive	X	255	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 626	626	1B	Active		158		Installation Restoration Program Site 20 ³ . Plotted as Installation Restoration Program Site 20, but not as a <90-day accumulation area on Figure 3-1 and Figure 3-4.	6*
TAA 634	634	2A	Active	X	-		Identified in 1994 SPCC Plan. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 636	636	3A	Inactive	X	160	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 651	651	1G	Active	X	165	X	Located within SWMU/AOC 164. From draft final RFA Addendum: six soil samples collected at 2 locations; a "release" was not detected. NFA and possible sampling recommended (BNI, 1995).	3*

Table 3-9
Less-Than-90-Day Accumulation Areas
(Sheet 5 of 6)

Database Tracking	Building Number	Parcel	Status	Closure Evaluation ¹	SWMU/ AOC	RFA Sampling	Comments	ECP Area Type ²
TAA 658	658	2A	Inactive	X	171	X	Four soil samples collected; SVOCs detected below PRGs at about 8.5 feet, confirming CLEAN I results; a "release" was not detected. NFA recommended (BNI, 1995).	3*
TAA 671	671	4A	Active	X	172	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 672	672	4A	Inactive	X	177		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 673	673	3A	Active	X	186	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 693	693	1G	Active		-		Identified in Station's HW Open Drum Inspection Report	7
TAA 698	698	5A	Inactive	X	-		Identified in 1994 SPCC Plan. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 744	744	1G	Active	X	-		Identified in 1994 SPCC Plan. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	7
TAA 746	746	2A	Active		-		Identified in Station's HW Open Drum Inspection Report	7
TAA 747	747	2A	Active		-		Identified in Station's HW Open Drum Inspection Report	7
TAA 761	761	3A	Inactive		-		Located at Installation Restoration Program Site 6 ³	7
TAA 765	765	3F	Inactive	X	266		Sampling visit not recommended during PR/VSI. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 769	769	4A	Inactive	X	222	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 770	770	4A	Inactive	X	223	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 771	771	1D	Inactive	X	224	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	2
TAA 772	772	3F	Inactive	X	225	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 778	778	5A	Inactive	X	226	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 779	779	5A	Inactive	X	227	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3
TAA 800	800	4B	Active	X	229	X	RFA recommended NFA. Investigated in draft final RFA Addendum; no sample taken, NFA recommended (BNI, 1995).	2
TAA 831	831	3A	Active		-		Identified in Station's HW Open Drum Inspection Report	7
TAA 856	856	3A	Active	X	234	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	3

Table 3-9
Less-Than-90-Day Accumulation Areas
(Sheet 6 of 6)

Database Tracking	Building Number	Parcel	Status	Closure Evaluation ¹	SWMU/AOC	RFA Sampling	Comments	ECP Area Type ²
TAA 900	900	2A	Active		-		Environmental Office accumulation area	7

Sources: Bechtel National, Inc. 1995. MCAS El Toro draft final Addendum to the Final RCRA Facility Assessment.
 Jacobs 1993. MCAS El Toro Final RCRA Facility Assessment Report.
 MCAS El Toro Hazardous Waste Open Drum Inspection Report Sheet
 SAIC 1994. Draft Oil and Hazardous Substances Spill Prevention and Countermeasure Plan and Contingency Plan (SPCC)

Notes: ¹ Accumulation areas are currently being evaluated for removal and/or decontamination strategies.
² An asterisk following an area type indicates that the area type designation is pending BCT approval.
³ SWMUs/AOCs that were determined to be located within RI/FS site boundaries were eliminated from RFA sampling visits. These SWMUs/AOCs will be investigated in the Installation Restoration Program.

Abbreviations: BCT - BRAC Cleanup Team
 BNI - Bechtel National, Inc.
 ECP - environmental condition of property
 HW - hazardous waste
 IRP - Installation Restoration Program
 NFA - no further action
 PCB - polychlorinated biphenyl
 PR/VS I - Preliminary Review/Visual Site Inspection performed as part of the RFA
 PRGs - US EPA Preliminary Remediation Goals
 RAC - Remedial Action Contractor
 RFA - Resource Conservation and Recovery Act (RCRA) Facility Assessment
 SPCC - Spill Prevention and Countermeasure Plan and Contingency Plan
 SVOCs - semi-volatile organic compounds
 SWMU/AOC - Solid Waste Management Unit/Area of Concern
 TAA - temporary accumulation area

Table 3-10
PCB Transformer Inventory
(Sheet 1 of 6)

Database Tracking	Building Number	Original Transformer ID Number	Location ³	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	ECP Area Type
PCB T1	6	F503496-65P	W, PD	Pad	Active	Original transformer present; no evidence of release observed.	5A	1
PCB T2	12	5KL505	CS	Pad	Replaced	Transformer replaced; no evidence of release observed.	1A	1
PCB T3	19	1350660	S, PL	Pole	Unknown ²	No evidence of release observed.	1A	1
PCB T4	35	NA	NW, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T5	58	23971	S, PL	Pole	Unknown ²	No evidence of release observed.	1C	1
PCB T6	59	6954405	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	1C	1
PCB T7	59	6954539	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	1C	1
PCB T8	59	6956179	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	1C	1
PCB T9	60	7092522	S, PL	Pole	Unknown ²	No evidence of release observed.	1C	1
PCB T10	65	645B17826	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1C	1
PCB T11	65	645B17827	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1C	1
PCB T12	65	645B17855	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1C	1
PCB T13	105	7093890	PL	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 16773-2) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	2A	1
PCB T14	114	177072	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T15	115	177071	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T16	118	681549	N, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T17	120	7093966	W, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T18	120	7092506P	W, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T19	120	7093966P	W, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T20	125	53233	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2A	1
PCB T21	125	6160963	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2A	1
PCB T22	129	7092697	NW corner, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T23	129	7092974	NW, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T24	129	7093975	NW, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T25	165	14346-1	N	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T26	203	5638241	SE, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T27	203	6455115	SE, PL	Pole	Unknown ²	No evidence of release observed.	2A	1

Table 3-10
PCB Transformer Inventory
(Sheet 2 of 6)

Database Tracking	Building Number	Original Transformer ID Number	Location ¹	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	ECP Area Type
PCB T28	248	6887930	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T29	248	66F2983	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T30	248	66F3028	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T31	248	66K117	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T32	248	66K154	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T33	248	NA	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed. Not plotted on Figure 3-1 or Figure 3-4.	1F	1
PCB T34	264	9750379	N, PD	Pad	Replaced	Transformer ID nos. 9750379 and 9750997 have been replaced with one transformer; no evidence of release observed.	1B	1
PCB T35	264	9750997	N, PD	Pad	Replaced	Transformer ID nos. 9750379 and 9750997 have been replaced with one transformer; no evidence of release observed.	1B	1
PCB T36	272	3700258	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T37	272	6962781	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T38	272	7093990	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T39	281	7093256	N, PD	Pad	Removed	Building has been demolished; no evidence of transformer	1B	1
PCB T40	281	7093261	N, PD	Pad	Removed	Building has been demolished; no evidence of transformer	1B	1
PCB T41	281	7220136	N, PD	Pad	Removed	Building has been demolished; no evidence of transformer	1B	1
PCB T42	285	6224013	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T43	285	7093682	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T44	285	7220241	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1

Table 3-10
PCB Transformer Inventory
(Sheet 3 of 6)

Database Tracking	Building Number	Original Transformer ID Number	Location ¹	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	ECP Area Type
PCB T45	311	B58240	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T46	327	72535	E, PL	Pole	Removed	Transformer has been removed.	1C	1
PCB T47	327	6587555	E, PL	Pole	Unknown ²	No evidence of release observed.	1C	1
PCB T48	327	65875666	E, PL	Pole	Unknown ²	No evidence of release observed.	1C	1
PCB T49	335	1888163	S, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T50	359	B335346	W, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4B	1
PCB T51	360	B335627	S, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4B	1
PCB T52	365	62194	B	Pad	Removed	Building demolished in 1988 and another building was constructed at the location; therefore, location could not be inspected.	1G	1
PCB T53	368	62220	C, RX	Pad	Removed	Transformer removed; no evidence of release observed.	4A	1
PCB T54	369	62221	N, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T55	370	62222	E, RX	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T56	371	10097-1	S, M	Pad	Active	A release of an oily liquid, possibly dielectric fluid, was present at the base of the transformer; further evaluation of release is needed.	5A	7
PCB T57	371	10098-1	S, M	Pad	Active	No evidence of release observed.	5A	1
PCB T58	372	14538	W, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T59	374	14440	S, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T60	378	06577-1	MH	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T61	383	B684198	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T62	386	4418	E, PD	Pad	Replaced	Transformer replaced (three transformers present); no evidence of release observed.	4A	1
PCB T63	406	9908129	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T64	410	NA	N, PL	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 14515) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	1F	1
PCB T65	410	NA	N, PL	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 14545) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	1F	1

Table 3-10
PCB Transformer Inventory
(Sheet 4 of 6)

Database Tracking	Building Number	Original Transformer ID Number	Location ¹	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	ECP Area Type
PCB T66	415	C379541	S, M	Pad	Replaced	Transformer replaced; no evidence of release observed.	2B	1
PCB T67	439	C-861785	NC, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T68	445	C861997A	NW, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T69	447	C861997B	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T70	449	7371282	B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T71	450	7371279	C, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T72	451	7371281	E, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T73	452	7371280	E, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T74	457	C-862139	S, PD	Pad	Replaced	Transformer replaced; location sampled during RFA (SWMU 244); further investigation planned.	3A	7
PCB T75	458	Missing	SE, PD	Pad	Unknown	Transformer in operation; original transformer ID no. unknown; according to manufacturer, manufactured in 1961.	3F	1
PCB T76	460	9845884	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3F	1
PCB T77	460	D317654	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3F	1
PCB T78	464	J929874T71AA	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3F	1
PCB T79	482	151103	S, PD	Pad	Removed	Building demolished; no evidence of transformer location.	5A	1
PCB T80	582	B336887	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2C	1
PCB T81	605	F-694715B	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T82	606	F-694715A	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T83	630	NA	NE, PL	Pole	Unknown ²	No evidence of release observed.	1C	1
PCB T84	631	10096-1	E, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T85	634	PAV 1646-01	EC, RI	Pad	Removed	Transformer enclosure present, but transformer removed; no evidence of release observed.	2A	1
PCB T86	634	YAP-70141	EC, RI	Pad	Removed	Transformer enclosure present, but transformer removed; no evidence of release observed.	2A	1
PCB T87	636	10832-1	RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T88	655	12945-1	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1

Table 3-10
PCB Transformer Inventory
(Sheet 5 of 6)

Database Tracking	Building Number	Original Transformer ID Number	Location ³	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	ECP Area Type
PCB T89	658	C173562	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2A	1
PCB T90	671	11344577P73AA	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T91	692	786787895	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T92	692	786787910	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T93	692	786787919	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T94	716	Westinghouse	SE, PD	Pad	Replaced	No evidence of release observed.	5A	1
PCB T95	1765	959077	S	NA	Unknown	Unable to identify transformer location. Not plotted on Figure 3-1 or Figure 3-4.	NA	1
PCB T96	5014	5635257	PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T97	5201	6963930P	PL	Pole	Unknown ²	No evidence of release observed.	2B	1
PCB T98	5240	6969510	E, PL	Pole	Removed	Transformer removed; no evidence of release observed.	2C	1
PCB T99	5417	7794141	Backyard, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T100	5417	7794142	Backyard, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T101	5417	7794143	Backyard, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T102	5215/5216	69680882	PL	Pole	Unknown ²	No evidence of release observed.	2C	1
PCB T103	687 ¹	793397	C, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T104	687 ¹	794144	C, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T105	687 ¹	6900519	C, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T106	Gate 9	6833177	E, PL	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T107	NA	66F2984	NA	NA	Unknown	Unable to identify transformer location. Not plotted on Figure 3-1 or Figure 3-4.	NA	1
PCB T108	NA	NA	NE, PI	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 14518) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	1F	1
PCB T109	Tank Farm #6	NA	W, PL	Pole	Unknown ²	No evidence of release observed.	2A	1
PCB T110	271-1	70465	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T111	271-1	70464	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T112	271-1	70609	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T113	280-1	8335544	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1

Table 3-10
PCB Transformer Inventory
(Sheet 6 of 6)

Database Tracking	Building Number	Original Transformer ID Number	Location ³	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	ECP Area Type
PCB T114	280-1	8335541	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T115	280-1	8335543	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1

Notes: ¹ Jacobs report indicates that transformer was located at Buildings 5103-5112 (housing).
² Pole-mounted transformers could not be accessed during field survey to verify transformer ID numbers.
³ Location abbreviations:

N - north side of building	C - center of building
S - south side of building	PD - outside pad
E - east side of building	PL - outside pole-mounted
W - west side of building	RI - inside room
NW - northwest side of building	RX - exterior room
M - interior mezzanine	B - basement

Abbreviations: ECP - environmental condition of property
 NA - not available
 PCB(s) - polychlorinated biphenyl(s)
 SWMU - Solid Waste Management Unit

Table 3-11
Non-Transformer PCB Equipment
(Sheet 1 of 1)

Building Number	Description	Concentration of PCBs (mg/L)	Comments	Parcel
56	3 oil-filled cutouts	1.4	Not on list	1C
138	3 oil-filled cutouts	1.0		2A
176	Explosion-proof switch box	< 1.0	Exterior	1A
178	Universal rectifier	3.8		1A
208	Universal rectifier	9.4	Contains 2 types of PCBs	2A
302	3 oil-filled cutouts	< 0.1	Out of service air conditioning motor	4A
311	3 oil-filled cutouts	< 0.005	West set of 3	4A
	3 oil-filled cutouts	< 0.005	East set of 3	
360	3 oil-filled cutouts	< 1.0	Area 1 (west)	4B
	3 oil-filled cutouts	< 0.005	Area 1 (east)	
	3 oil-filled cutouts	2.8	Area 2	
	3 oil-filled cutouts	1.0	Area 1 (middle)	
372	3 oil-filled cutouts	1.6	Transformer room	5A
382	Oil-filled switch	< 1.0	Not on list	1C
384	3 oil-filled cutouts	8.2	On transformer	3A
414	3 oil-filled cutouts	< 1.0		5A
435	3 oil-filled cutouts	< 1.0		5A
	3 oil-filled cutouts	15.0		
439	3 oil-filled cutouts	4.2	In basement	1G
	3 oil-filled cutouts	< 1.0	In basement	
547	Motor control center	6.9		2D
599	3 oil-filled cutouts	< 0.005	Sampled drippings	4A
619	3 oil-filled cutouts	< 1.0	Transformer room	3F
643	3 oil-filled cutouts	< 1.0	North set of 3	5A
	3 oil-filled cutouts	5.0	South set of 3	
651	3 oil-filled cutouts	< 1.0	On transformer	1G
664	3 oil-filled cutouts	< 1.0	Exterior	3A
733	3 oil-filled cutouts	< 1.0		1G
892	3 oil-filled cutouts	< 0.005	Leaking	3A

Source: Kennedy/Jenks 1991

Abbreviations PCB – polychlorinated biphenyl
 mg/L – milligrams per liter

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-12
Buildings with Known Asbestos¹
(Sheet 1 of 6)

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 2	2	Hangar bay/ crew/equip	1943	5A	X	
BLD 3	3	Material/IMRL	1943	5A	X	
BLD 4	4	Search & rescue	1943	5A	X	
BLD 6	6	Security Headquarters	1943	5A		NF
BLD 7	7	Storage out of stores	1943	5A	X	
BLD 8	8	Storage out of stores	1943	5A	X	
BLD 9	9	Storage out of stores	1943	5A	X	
BLD 11	11	Squadron headquarters	1943	1A		NF
BLD 12	12	Group headquarters	1943	1A		NF
BLD 15	15	Electrical/communications maintenance shop	1943	1A		NF
BLD 16	16	Storage out of stores	1943	1A	X	
BLD 19	19	Squadron headquarters	1943	1A		NF
BLD 20	20	Maintenance/storage	1943	1A	X	
BLD 21	21	General storage shed	1943	1A	X	
BLD 22	22	Electrical/communications maintenance shop	1943	1A	X	
BLD 23	23	Storage out of stores	1943	1A		NF
BLD 25	25	Construction shop	1943	1D	X	
BLD 26	26	Communication shop	1943	1A	X	
BLD 27	27	Provost Marshall Office storage	1943	1D	X	
BLD 29	29	Navy Investigative Service Field Office	1943	1D		NF
BLD 31	31	Utilities shop/TAFDS	1943	1D	X	
BLD 32	32	Bachelor Officers Quarters	1943	1D		NF
BLD 33	33	Bachelor Officers Quarters	1943	1D		NF
BLD 34	34	Bachelor Officers Quarters	1943	1D		NF
BLD 35	35	Bachelor Officers Quarters	1943	1D		NF
BLD 46	46	Reproduction	1943	1D	X	
BLD 51	51	Auto organizational shop	1943	1D		NF
BLD 52	52	Storage out of stores	1943	1D	X	
BLD 53	53	RASC/IRC classroom	1943	1D	X	
BLD 56	56	Squadron headquarters	1943	1C		NF
BLD 57	57	Bathhouse	1943	1C		F
BLD 58	58	Family Housing Services Office	1943	1C		F
BLD 59	59	Administration Office	1943	1C	X	
BLD 60	60	Reserve support unit	1943	1C		NF
BLD 66	66	Disbursing office	1943	1B		F
BLD 75	75	Administration office/Fire Headquarters/Phone Center	1943	1B		NF
BLD 77	77	Exchange warehouse/maintenance shop	1943	1B		F
BLD 83	83	Chapel administration office	1943	1B		F
BLD 94	94	Gymnasium	1943	1B		F
BLD 96	96	Transportation office	1943	4A	X	
BLD 105	105	Group headquarters	1943	2A	X	
BLD 114	114	Maintenance hangar space	1966	5A		NF
BLD 115	115	Maintenance hangar space	1966	5A		NF
BLD 118	118	Maintenance hangar space	1943	2A	X	
BLD 119	119	Maintenance hangar space	1943	2A	X	
BLD 120	120	Maintenance hangar space	1943	2A	X	
BLD 122	122	Maintenance hangar space	1943	2A	X	
BLD 123	123	Maintenance hangar space	1943	2A	X	

Table 3-12
Buildings with Known Asbestos¹
(Sheet 2 of 6)

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 125	125	Maintenance hangar space	1943	2A		NF
BLD 126	126	Maintenance hangar space	1943	2A	X	
BLD 127	127	Tire storage	1943	2A	X	
BLD 132	132	Aviation armament shop	1943	2A	X	
BLD 133	133	Storage	1943	2A		NF
BLD 134	134	MCP Storage/hangar maintenance administration	1943	2A		NF
BLD 135	135	Warehouse 222nd CCSQ	1943	2A	X	
BLD 136	136	Nuclear/biological/chemical storage	1943	2A	X	
BLD 138	138	Electronics Maintenance Division	1943	2A		F
BLD 139	139	3rd Marine Air Wing Embark	1943	2A	X	
BLD 142	142	Hazardous/flammable storage	1943	2A	X	
BLD 146	146	Standby generator building	1943	1C	X	
BLD 163	163	Magazine Ready Service ²	1943	3A	X	
BLD 164	164	Small arms storage ²	1943	3A	X	
BLD 165	165	Hazardous/flammable storage	1943	3A	X	
BLD 166	166	Small arms storage ²	1943	3F	X	
BLD 167	167	Small arms storage ²	1943	3F	X	
BLD 169	169	NBC storage	1943	3F	X	
BLD 170	170	Ready service storage magazine ²	1943	3F	X	
BLD 171	171	Ready service storage magazine ²	1943	3F	X	
BLD 172	172	Ready service storage magazine ²	1943	3F	X	
BLD 240	240	Aero Club 4	1944	1A	X	
BLD 241	241	Laundry pick-up point	1945	1A	X	
BLD 242	242	Museum	1944	1A	X	
BLD 243	243	Historical center	1944	1A	X	
BLD 244	244	Historical collection	1944	5A		NF
BLD 249	249	VIP quarters	1945	1D		NF
BLD 250	250	VIP quarters	1945	1D		NF
BLD 251	251	Conference Center/Recreation Pav.	1944	1D	X	
BLD 256	256	Aviation physical training/medical clinic	1945	1C	X	
BLD 257	257	Administration office	1944	1C	X	
BLD 263	263	Education service office	1945	1B		NF
BLD 271	271	Auditorium	1944	1B	X	
BLD 273	273	Post Office	1944	1C	X	
BLD 275	275	Training/Storage WG Band ²	1944	1B		F
BLD 276	276	Bachelors Enlisted Quarters ²	1945	1B		F
BLD 277	277	Bachelors Enlisted Quarters ²	1945	1B		NF
BLD 279	279	Rehabilitation center	1945	1B	X	
BLD 285	285	Club system warehouse	1944	1B		F
BLD 288	288	Maintenance hangar space	1944	5A		F
BLD 289	289	Maintenance hangar space	1944	5A		NF
BLD 290	290	General storage	1944	2A	X	
BLD 291	291	Nuclear/biological/chemical	1944	2A		NF
BLD 295	295	Maintenance hangar space	1944	5A		F
BLD 296	296	Maintenance hangar space	1944	5A		F
BLD 297	297	Maintenance hangar space	1944	5A		F
BLD 299	299	Auto vehicle maintenance shop	1944	4A		NF
BLD 302	302	Public works electronics shop	1945	4A		NF

Table 3-12
Buildings with Known Asbestos¹
(Sheet 3 of 6)

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 304	304	Academic instruction/credit union	1945	4A		NF
BLD 305	305	Group headquarters	1944	4B	X	
BLD 306	306	Public works pipe/heat/refrigeration shop	1944	4A		NF
BLD 307	307	EAF storage/station operations maintenance Squadron Recovery Headquarters	1944	4A		NF
BLD 308	308	Ground support equipment storage	1944	2A		NF
BLD 309	309	Group headquarters	1944	4A		NF
BLD 310	310	Hangar ²	1944	5A	X	
BLD 312	312	Photo lab ²	1944	4A		F
BLD 313	313	Field maintenance shop	1944	4B		NF
BLD 315	315	A/C ground support equipment shop	1945	5A		NF
BLD 317	317	Commissary warehouse	1945	4B		NF
BLD 318	318	General warehouse Navy	1945	4B		NF
BLD 319	319	General warehouse Navy	1945	4B	X	
BLD 321	321	Administration office/general warehouse Navy	1945	4B		F
BLD 322	322	Mess halls enlisted ²	1945	4B		F
BLD 324	324	Applied instruction/storage/CO ₂ storage	1945	4A		F
BLD 325	325	Hazardous/flammable storehouse	1945	4A		NF
BLD 326	326	Hazardous/flammable storehouse	1945	4A		F
BLD 328	328	Temporary administration spaces	1945	1C		F
BLD 329	329	Defense Commissary Agency Headquarters	1945	1C		F
BLD 333	333	Field maintenance shop	1945	4A	X	
BLD 341	341	Ground support equipment shop	1945	2A	X	
BLD 355	355	Snack Bar #12	1943	4B	X	
BLD 357	357	Hazardous/flammable storehouse	1951	4A	X	
BLD 358	358	Water distribution building	1951	5A	X	
BLD 360	360	General warehouse Navy	1952	4B		F
BLD 363	363	Miscellaneous POL pipeline shelter	1952	2A	X	
BLD 364	364	Mess Hall #2	1952	1G		NF
BLD 366	366	Billeting office	1954	1G		F
BLD 367	367	Bachelor Enlisted Quarters/academic instruction	1954	1G		NF
BLD 368	368	Administration office	1954	4A		NF
BLD 369	369	Servmart	1954	4A		F
BLD 370	370	Public works paint/carpentry/meral trades	1954	4A		F
BLD 371	371	Maintenance hangar space	1954	5A		NF
BLD 372	372	Airfield Operations Bldg.	1954	5A		NF
BLD 374	374	Heating plant bldg./conversion station	1954	3A		NF
BLD 375	375	Bachelor Officers Quarters	1954	1D		F
BLD 376	376	Fire station dispatch/ground safety	1954	1C		NF
BLD 382	382	Electrical Distribution Subs #1	1951	1C		NF
BLD 383	383	Electrical Distribution Subs #2	1954	4A		NF
BLD 384	384	Electrical Distribution Subs #3	1954	3A		NF
BLD 385	385	Electrical Distribution Subs #4	1954	2A	X	
BLD 386	386	Construction equipment shop	1955	4A	X	
BLD 388	388	Field maintenance shop	1955	4A		NF
BLD 392	392	Aircraft ground support equipment shop	1955	2A		F
BLD 394	394	Transmitter	1956	5C		NF
BLD 404	404	Receiver building	1957	5A		NF
BLD 405	405	Applied instruction building	1956	3A		F

Table 3-12
Buildings with Known Asbestos¹
(Sheet 4 of 6)

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 406	406	Applied instruction building	1956	3A		F
BLD 407	407	Squadron Headquarters	1956	3A		NF
BLD 415	415	Storage out of stores	1957	2B		NF
BLD 416	416	Storage building	1957	3F		NF
BLD 439	439	Branch medical/dental clinic	1959	1G		NF
BLD 440	440	Missile magazine	1959	3A	X	
BLD 441	441	Aviation armament/Station ordnance	1959	3A		F
BLD 442	442	Aviation armament/Station ordnance	1959	3A		F
BLD 443	443	Academic instruction bldg./LVT center/photo lab	1959	1G		F
BLD 445	445	Hazardous/flammable storehouse	1959	4A		NF
BLD 449	449	Bachelor Enlisted Quarters	1959	1G		F
BLD 450	450	Bachelor Enlisted Quarters	1959	1G		F
BLD 451	451	Bachelor Enlisted Quarters	1959	1G		F
BLD 452	452	Bachelor Enlisted Quarters	1959	1G		F
BLD 453	453	Maintenance hangar space	1960	3A		NF
BLD 454	454	Maintenance hangar space	1960	3A		NF
BLD 456	456	General warehouse/aviation supply	1960	3A		F
BLD 457	457	Group Headquarters/barb shop/dental clinic/mess hall	1960	3A		F
BLD 458	458	Hazardous flammable storehouse	1960	5A	X	
BLD 463	463	Maintenance hangar space/engine maintenance shop	1960	5A		NF
BLD 464	464	Golf course clubhouse	1959	3F		F
BLD 469	469	Equipment storage building	1959	3A	X	
BLD 475	475	Storage building/disbursing	1946	1B	X	
BLD 523	523	Storage	1945	1B	X	
BLD 529	529	Public works expend VIP storage	1944	4A		NF
BLD 543	543	High explosive magazine	1952	2F	X	
BLD 544	544	High explosive magazine	1952	2F	X	
BLD 545	545	High explosive magazine	1952	2F	X	
BLD 546	546	High explosive magazine	1952	2F	X	
BLD 555	555	POL sampling/test building	1955	2D		F
BLD 556	556	Miscellaneous POL pipeline facility	1955	2D		NF
BLD 568	568	Standby generator building	1956	5C	X	
BLD 578	578	Water distribution building	1957	1F		NF
BLD 600	600	Storage out of stores	1961	1A		NF
BLD 605	605	Maintenance hanger space	1965	5A		F
BLD 606	606	Maintenance hanger space	1965	5A		F
BLD 611	611	Missile magazine	1966	3A	X	
BLD 615	615	Handball courts	1966	1F	X	
BLD 616	616	Administration office	1966	4A		NF
BLD 619	619	Standby generator building	1966	3F		F
BLD 624	624	Air terminal/SQ Headquarters	1967	5A		NF
BLD 625	625	Hobby shop/automotive	1967	1B	X	
BLD 626	626	Hobby shop/automotive	1967	1B	X	
BLD 629	629	Academic instruction building	1968	1C		NF
BLD 631	631	Applied instruction building	1968	4A	X	
BLD 634	634	Hangar/gng. maintenance/avionics shop	1969	2A		NF
BLD 636	636	Parach./survey equipment/cryogenics office	1969	3A		F
BLD 639	639	Electric power plant building	1969	5A	X	

Table 3-12
Buildings with Known Asbestos¹
(Sheet 5 of 6)

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 640	640	Electric power plant building	1969	5A	X	
BLD 641	641	Electric power plant building	1969	5A	X	
BLD 642	642	Electric power plant building	1969	5A	X	
BLD 649	649	Exchange warehouse/retail/cafeteria	1970	1G		F
BLD 650	650	Exchange retail shop	1970	1G		NF
BLD 651	651	Exchange auto repair/supplemental gas station	1971	1G		NF
BLD 655	655	Field maintenance shop	1970	4A		NF
BLD 658	658	Engine test cell	1972	2A		NF
BLD 660	660	Bachelor Enlisted Quarters	1973	1G		F
BLD 661	661	Transient Enlisted Quarters	1973	1G		F
BLD 664	664	Substation building	1971	3A	X	
BLD 666	666	Bachelor Enlisted Quarters	1973	1G		F
BLD 667	667	Bachelor Enlisted Quarters	1973	1G		F
BLD 668	668	Bachelor Enlisted Quarters	1973	1G		F
BLD 669	669	Bachelor Enlisted Quarters	1973	1G		F
BLD 671	671	Refueler administration	1973	4A		NF
BLD 672	672	Refueling vehicle maintenance shop	1973	4A	X	
BLD 673	673	ACFT/ground support equipment shed	1974	3A		NF
BLD 676	676	Community storage miscellaneous	1973	2C	X	
BLD 677	677	Meteorological building	1958	5A	X	
BLD 678	678	Housing/maintenance storage	1973	2C	X	
BLD 683	683	Cold storage/general warehouse	1974	1A		NF
BLD 684	684	Applied instruction building	1974	1C	X	
BLD 685	685	Electrical distribution building	1974	1A	X	
BLD 688	688	Receiver building	1973	2F		NF
BLD 689	689	Receiver/activity TV antenna	1973	2F	X (previously blank)	
BLD 693	693	Operational flight trainer (KC-130)	1975	1G	X	
BLD 694	694	Commissary	1975	1G		NF
BLD 695	695	Line maintenance shelter	1975	5A		NF
BLD 696	696	Line maintenance shelter	1975	5A		NF
BLD 697	697	Line maintenance shelter	1975	5A		NF
BLD 698	698	Line maintenance shelter	1975	5A		NF
BLD 713	713	Hazardous/flammable storehouse	1977	2B	X	
BLD 714	714	Line maintenance shelter	1977	5A		NF
BLD 715	715	Line maintenance shelter	1977	5A		NF
BLD 716	716	Hush house	1978	5A		NF
BLD 717	717	Crash, fire, rescue storage	1978	5A		NF
BLD 718	718	Modular Club/Lamport Pizza	1978	1B		NF
BLD 722	722	Convenience food store	1979	2C		NF
BLD 726	726	Line maintenance shelter	1981	5A		NF
BLD 727	727	Line maintenance shelter	1981	5A		NF
BLD 728	728	Line maintenance shelter	1983	5A		NF
BLD 730	730	Communications center	1980	1A		NF
BLD 731	731	Enlisted Personnel Quarters	1980	1G		NF
BLD 732	732	BEQ P-054	1980	1G		NF
BLD 733	733	Boiler room P 054	1980	1G		NF
BLD 734	734	Restroom P-313	1980	2A		NF
	735	Generator Bldg 9-313 ³	1980	NL		NF

Table 3-12
Buildings with Known Asbestos¹
(Sheet 6 of 6)

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 740	740	BEQ P-326 "B"	1982	1G		NF
BLD 741	741	BEQ P-326 "C"	1982	1G		NF
BLD 743	743	Financial building	1971	1G		NF
BLD 745	745	Warehouse (Mag-II) P-296	1983	2A		NF
BLD 746	746	Flight simulator P-270	1984	2A		NF
	747	Maintenance	1983	2A	X	
BLD 748	748	Restroom	1983	2A		F
BLD 749	749	Restroom P-437	1983	2A		NF
	750	Sentry booth	1983	2A	X	
	751	Storage	1983	2A	X	
BLD 752	752	Fuel Farm #5 office	1983	2A		NF
BLD 757	757	Mars	1983	1F		NF
	782	Storage	1983	3F	X	
BLD 783	783	Exchange administration/service outlets	1983	1G		NF
BLD 787	787	NBC Defense Platoon Facility	1984	3A		NF
BLD 1524	1524	General storage shed	1945	1C		NF
BLD 1538	1538	Fuel Farm #4 office	1945	2A	X	
BLD 1580	1580	General warehouse Navy	1945	4B	X	
BLD 1595	1595	Public works maintenance storage	1945	4A		NF
BLD 1601	1601	Public works maintenance storage	1945	4A		NF
BLD 1650	1650	Aviation armament	1947	3A	X	
BLD 1655	1655	Squadron Headquarters	1947	3A	X	
BLD 1656	1656	Administration storage	1947	3A	X	
BLD 1703	1703	Hazardous/flammable storehouse	1952	4B		NF
BLD 1710	1710	Public works maintenance storage	1946	4A	X	
BLD 1719	1719	Applied instruction building	1946	3A	X	
BLD 1720	1720	NBC Headquarters	1946	3A	X	
BLD 1721	1721	Bachelor Enlisted Quarters	1946	3A		NF
BLD 1752	1752	Magazine equipment shed	1956	5C	X	
BLD 1787	1787	Aviation armament	1958	3A	X	
BLD 1791	1791	Aviation armament	1946	3A	X	
BLD 1804	1804	Lunchroom	1966	2A		NF
BLD 1815	1815	Line maintenance shelter	1979	5A	X	

Sources: Ecology and Environment, Inc., 1991. MCAS Camp Pendleton, El Toro and Tustin, Asbestos Survey and Assessment.
 Ecology and Environment, Inc., 1991. MCAS Camp Pendleton, El Toro and Tustin, Asbestos Survey and Assessment.
 IT Corporation 1989. MCAS El Toro Asbestos Survey and Assessment.

Notes: ¹ This table does not include information from asbestos surveys conducted at residential housing communities. Asbestos surveys were performed for the following residential communities in 1995: Moffett Meadows/Saddleback Terrace (17 units), Namar Housing (216 units), San Joaquin Housing (300 units), Wherry Housing (553 units), and Saddleback Terrace/Vista Terrace (100 units). Results are summarized in Section 3.2.5 of this document.
² Scheduled to be demolished per MCAS El Toro Building List dated 20 August 1993.
³ Location not known.

Abbreviations: BLD - building
 F - friable asbestos
 NF - non-friable asbestos
 NL - not located on station maps

Table 3-13
Summary of SWMUs/AOCs
(Sheet 1 of 18)

Database Tracking	SWMU/AOC Number ¹	RFA Recommendation	Type	Location, Building, or Number	Sampling Visit	Comments	Parcel	ECP Area Type ²
RFA 1	1	NFA	Former scrap metal yard	Near golf course		Source: NEESA photograph	3F	1
RFA 2	2	NFA	Vegetation Piles	Near golf course		Source: NEESA photograph	3F	1
IRP 25	3	NFA	Marshburn Channel	Adjacent to NW boundary	X	To be addressed in IRP Site 25	1G	6
IRP 25	4	NFA	Bee Canyon Wash	Traverses Station in an EW direction	X	To be addressed in IRP Site 25	5A	6
IRP 25	5	NFA	Borrego Canyon Wash	Adjacent to SE boundary	X	To be addressed in IRP Site 25	5A	6
RFA 6	6	NFA	Landfarming site	NW of Bee Canyon Wash	X	RFA recommended NFA	5A	3
RFA 7	7	FA	Transformer storage area	East of Bee Canyon Wash	X	18 soil samples collected at 6 locations; PCBs screened above action level in one sample. Location recommended for transfer to the RAC contractor for limited surface soil cleanup of PCBs (draft final RFA Addendum, BNL 1995).	4B	6*
RFA 8	8	NFA	Abandoned Well 50-3285	West of Bldg. 809	X	RFA recommended NFA	2F	2
RFA 9	9	NFA	Fuel bladder	East of Agua Chino Wash	X	Twenty samples collected from 5 locations at 4 depths; diesel screened above 100 mg/kg at one location from 8 to 12 feet deep. NFA recommended (draft final RFA Addendum, BNL 1995).	5A	3*
IRP 3	10	FA in IRP ³	Abandoned Well 24-4274	East of Bldg. 385		To be addressed in IRP Site 3 ³	2A ⁴	6
IRP 25	11	NFA	Agua Chino Wash	Traverses Station in an EW direction	X	To be addressed in IRP Site 25	5A	6
RFA 12	12	NFA	Active sanitary sewer lines	Stationwide		Sanitary wastes. Not plotted on Figure 3-1 or Figure 3-4.	NA	1
RFA 13	13	NFA	Drop tank storage area	SW of Bldgs. 114 & 115	X	RFA recommended NFA	2A	3
RFA 14	14	FA	Drop tank fuel storage area	NW of Bldg. 605	X	RFA recommended repair of cracks in pavement	5A	6
RFA 15	15	NFA	Wash water runoff site	SW of fueling station 576	X	RFA recommended NFA	5A	3
RFA 16	16	NFA	Wash water runoff site	NW of fueling station 574	X	RFA recommended NFA	5A	3
UST T5	17	NFA	Underground storage tank	Tank Farm 2		Spill containment tank	1A	7
UST T2	18	NFA	Underground storage tank	Tank Farm 4		Spill containment tank	5A	7
UST T3	19	NFA	Underground storage tank	Tank Farm 4		Spill containment tank	2A	7

Table 3-13
Summary of SWMUs/AOCs
(Sheet 2 of 18)

Database Tracking	SWMU/AOC Number ¹	RFA Recommendation	Type	Location, Building, or Number	Sampling Visit	Comments	Parcel	FCP Area Type ²
UST 414C	20	NFA	Underground storage tank	414	X	RFA recommended NFA	5A	7
UST T6	21	NFA	Underground storage tank	Tank Farm 5		Spill containment tank	2A	7
UST T8	22	NFA	Underground storage tank	Tank Farm 5, 6		Spill containment tank	2A	7
UST T1	23	NFA	Underground storage tank	Tank Farm 555		Spill containment tank	2D	7
UST T7	24	NFA	Underground storage tank	Tank Farm 6		Spill containment tank	5A	7
TAA 5A	25	NFA	< 90-day accumulation area	5		Located on tarmac. Site visited for RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	5A	2
TAA 5B	26	FA	< 90-day accumulation area	5	X	RFA recommended excavation of shallow stained soil. Site visited for RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	1A	6
TAA 10	27	NFA	< 90-day accumulation area	10	X	RFA recommended NFA. Site visited for RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	1A	2*
RFA 28	28	NFA	Fuel spill site	AERO CLUB 10		Past routine fuel spills; no evidence of release ³ . Not plotted on Figure 3-1 or Figure 3-4.	5A ⁴	2
TAA 29A	30	NFA	< 90-day accumulation area	29	X	RFA recommended NFA. Site visited for RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed; area has been cleaned as of 12/94 Area clean and vacant as of 11/95	1D	3*
TAA 29B	31	FA in IRP ⁶	< 90-day accumulation area	29		Located in IRP Site 15 ⁷ . Sampling visit not recommended during PR/VSI. Site visited for RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed; area has been cleaned as of 12/94 Area clean and vacant as of 11/95	1D	3*
	32	NFA	Drum storage area	36		Source: 1989 RWQCB letter ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	1D ⁴	NA

**Table 3-13
Summary of SWMUs/AOCs
(Sheet 3 of 18)**

Database Tracking	SWMU/AOC Number ¹	RFA Recommendation	Type	Location, Building, or Number	Sampling Visit	Comments	Parcel	ECP Area Type ²
TAA 51	33	FA	< 90-day accumulation area	51	X	RFA recommended excavation of shallow, stained soil. Site visited for RFA Addendum (BNI, 1995); evaluation of removal and/or decontamination strategy proposed.	1D	6
	35	NFA	< 90-day accumulation area	96		Source: SPCC map (no date) ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	4A ⁴	NA
TAA 114	38	NFA	< 90-day accumulation area	114		No materials present; no surface defects. Site visited for RFA Addendum (BNI, 1995); evaluation of removal and/or decontamination strategy proposed.	5A	2
TAA 115	39	NFA	< 90-day accumulation area	115	X	Four soil samples collected at one location; SVOCs detected below PRGs at about 8.5 feet, confirming CLEAN I results; a "release" was not detected. NFA recommended (draft final RFA Addendum.	5A	3*
	40	NFA	Drum storage area	127		Source: 1989 RWQCB letter ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	2A ⁴	NA
RFA 41	41	NFA	Vehicle wash rack	127	X	RFA recommended NFA	2A	3
TAA 130C	42	NFA	< 90-day accumulation area	130		Surface free of defects. Site visited for draft final RFA Addendum (BNI, 1995); evaluation of removal and/or decontamination strategy proposed.	2A	2
	43	NFA	Drum storage area	137		Source: DHS photograph ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	2A ⁴	NA
	44	NFA	Drum storage area	143		Source: 1989 RWQCB letter ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	2A ⁴	NA
TAA 155C	45	NFA	< 90-day accumulation area	155	X	RFA recommended NFA	5A	3
RFA 46	46	FA	Equipment storage yard	163	X	12 soil samples collected; diesel detected at one location in one sample below action levels; the "release" detected by RFA activities did not extend in area. Transfer to the RAC for limited surface soil clean up of diesel (draft final RFA addendum, 1995).	3A	6*
	47	NFA	< 90-day accumulation area	172		Location not known ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	3F ⁴	NA
UST 178	48	NFA	Underground storage tank	178	X	RFA recommended NFA	1A	7
UST 179	49	NFA	Underground storage tank	179	X	RFA recommended NFA	1A	7
	50	NFA	Drum storage area	179		Source: DHS photograph ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	1A ⁴	NA

**Table 3-13
Summary of SWMUs/AOCs
(Sheet 4 of 18)**

Database Tracking	SWMU/AOC Number ¹	RFA Recommendation	Type	Location, Building, or Number	Sampling Visit	Comments	Parcel	ECP Area Type ²
UST 180	51	NFA	Underground storage tank	180		No sampling, based on 1990 tank test	1A	7
UST 182	52	NFA	Underground storage tank	182		No sampling, based on 1990 tank test	1A	7
	55	NFA	Drum storage area	186		Source: DHS photograph ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	1D ⁴	NA
	56	NFA	Drum storage area	187		Source: DHS photograph ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	1D ⁴	NA
UST 189	57	NFA	Underground storage tank	189	X	RFA recommended NFA	1A	7
UST T4	58	NFA	Underground storage tank	189		Spill containment tank	1A	7
UST 191	59	NFA	Underground storage tank	191	X	RFA recommended NFA	1A	7
UST 204	60	NFA	Underground storage tank	204		No sampling, based on 1990 tank test	5A	7
UST 205	61	NFA	Underground storage tank	205		No sampling, based on 1990 tank test	5A	7
UST 206	62	NFA	Underground storage tank	206		No sampling, based on 1990 tank test	5A	7
UST 207	63	NFA	Underground storage tank	207		No sampling, based on 1990 tank test	5A	7
TAA 240	64	NFA	< 90-day accumulation area	240		Newly constructed; no release observed. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	1A	2
UST 240B	65	NFA	Underground storage tank	240	X	RFA recommended NFA	1A	7
OWS 240C	66	NFA	Oil/water separator	240	X	Combined with SWMU/AOC 65	1A	7
TAA 242	67	FA in IRP ⁶	< 90-day accumulation area	242		Located in IRP Site 13 ⁶ . Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	1A	7
OWS 244	68	NFA	Oil/water separator	244		Location not known ⁵ .	5A	7
	69	NFA	Drum storage area	262		Source: 1989 RWQCB letter ⁵ . SWMU not plotted on Figure 3-1 or 3-4.	1B ⁴	NA
TAA 289	70	NFA	< 90-day accumulation area	289	X	RFA recommended NFA. Site visited for draft final RFA Addendum (BNI, 1995): evaluation of removal and/or decontamination strategy proposed.	5A	3
IRP 7	71	FA in IRP ⁴	< 90-day accumulation area	295		To be addressed in IRP Site 7 ⁵ .	5A	6